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ABSTRACT

An assessment of the training needs of Broward County, Florida, employers was conducted: (1) to determine the existing training needs of large businesses, industrial firms, and local units of government; (2) to determine which educational agencies in the county could fulfill these needs; and (3) to inform the companies of the results in order to begin planning for needed programs. From the 830 employers who had 50 or more employees, a stratified random sample of 400 employers responded to questionnaire interviews. Variables studied included: geographical area, company type (occupational category), employee qualities, types of positions or job categories (current numbers employed in each and one-, two-, and five-year projections), recruitment, current training, identified training needs, incentives, interest in training programs, employment of handicapped, and affirmative action plans. Findings indicated numerous training needs, primarily in the medical and industrial fields. Many of the programs currently offered needed to focus on job-entry competencies, and in other areas supplemental training was needed to upgrade and/or retrain present employees. In still other areas, no training was available. A literature review and survey methodology are discussed. Appendices contain the questionnaire and other occupational information. (Author/MB)

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BROWARD COUNTY

Employers' Training Needs Assessment

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Program funded by the Department of Labor through the
Broward Employment and Training Administration

JC 790 177

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ABSTRACT

BROWARD COUNTY EMPLOYER TRAINING NEEDS ASSESSMENT

by

Mantha Vlahos Mehallis

An assessment of the training needs of Broward County, Florida employers was conducted by the Office of Institutional Research and Systems Planning of Broward Community College (BCC) funded by the Department of Labor through the Broward Employment and Training Administration (BETA). The purpose of the study was:

(1) To determine the existing training needs of large businesses, industrial firms, and local units of government in Broward County;

(2) To determine which educational agencies in the County can best fulfill these needs;

(3) To inform the companies of the results in order to begin planning for the needed programs.

The descriptive, personal interview approach was used as the research method. A stratified random sampling was selected from the 830 employers with 50 or more employers in the fall of 1977. Strata consisted of geographic location (north, central, and south sector of the county) and company type (industrial, 21.5%; non-industrial, 75.7%; government, 2.8%). All employers were contacted, and 400 completed interviews were obtained by the project coordinator and three interviewers with only 8% refusals. Variables studied included: sector (north, central, and south), company type (occupational category), employee qualities, types of positions or job categories (current numbers employed in each, one-, two-, and five-year projections), recruitment, current training, identified training needs, incentives, interest in training programs, employment of handicapped, and affirmative action plans.

The questionnaire was pilot-tested to determine validity and reliability. Data were analyzed descriptively by frequency distributions and crosstabulations of variables for establishment of baseline results. Analysis of variance and multiple regression analyses were also performed and resulted in no significant difference in the existence of training needs in occupational categories throughout the county. The only difference is in the specific type of need within each job category.

Findings indicate there are numerous training needs in the county, primarily in the medical and industrial (manufacturing, electronics, marine industry, and other highly skilled technical areas) fields. Many of the programs currently being offered by the educational agencies should be revised to focus on competencies necessary for job-entry. In numerous areas supplemental training is needed to upgrade and/or retrain present employees.

Other areas exist where there currently is no available training. Programs should be developed by the educational agencies and the employers jointly to fill the gaps. Employers were informed of the results and many will be working with BCC to form stronger communication linkages for the purpose of implementing the needed programs.

FOREWORD

The Department of Labor through the Broward Employment and Training Administration made the Broward County Employer Training Needs Assessment possible by funding the CETA Title VI Project submitted by Broward Community College's Office of Institutional Research and Systems Planning, for 1977-78. The assistance of both the Broward Industrial Board and the Fort Lauderdale Area Chamber of Commerce contributed to community acceptance and field validation of the project. Their support was appreciated greatly.

Further support was present from Broward Community College's Board of Trustees, President A. Hugh Adams, and Executive Vice President, Clinton D. Hamilton. They endorsed the project which enabled the Project Director, Mantha Vlahos Mehallis to employ Kathleen Koontz as Project Coordinator. Ms. Koontz did an outstanding job as a Coordinator in organizing the three interviewers, Pearl Hersom, June Johnson, and Joann Skudlarek, into a team with the research and interviewing skills necessary to complete the project. All contributed to the success of the project, which is described in detail herein.

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Introduction

The Broward County Training Needs Assessment Survey is an outgrowth of the need for planning by both the educational agencies and the business/industry/government employers of the county. This report addresses itself to such factors as current and future needs for training and manpower, present capabilities of educational agencies to meet the manpower needs, and recommendations for community planning to meet those needs.

The information base for the study was comprised of 400 major employers in Broward County (business, industry and local units of government with 50 or more employees). Information was fed back to each of the survey respondents and educational agencies in the county, thus providing them with the assessed manpower training needs and recommendations relative to their own business and educational activities. The data base generated by the survey will provide countless items of information of importance to employers and educators for use in planning and program development.

This study has been an attempt to direct attention to the community-based educational needs. The benefits of such a study include the opportunity to define needs more effectively to identify most appropriate solutions, and to promote interaction between the public and private sector to facilitate the delivery of instruction which contributes to the economic well-being of the community.

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Review of the Literature

A needs assessment is a systematic study to identify if a need exists and, if so, to validate the existing need, or gap between "what is" and "what should be." In this paper, a need is defined as that gap (Kaufman, 1972). Research methods for assessing needs are becoming essential tools for educational decision-making and planning (Hershkowitz).

> "Technology continues to increase the complexity of our occupational society. It is not simply a matter of the increasingly rapid rate at which new occupations are created. Rather, it also involves recognition of the fact that these newer occupations require more skills and knowledge. As a result, the demand for unskilled labor diminishes each year. Relationships between education and work become closer and closer...Yet both educators and the business-labor-industry community have failed to act constructively in accommodating to this fact.
> (Hoyt, 1975, p.355)

As pointed out by Campbell (1977, p.40), "Industrial education, to be effective, must serve the people who live, work, and play in a particular environment ... If industrial education is to be meaningful and assist the student toward gainful, rewarding employment, all levels of industrial education must step back and take a long hard look. Industrial educators should determine if student and community needs are being met. A needs assessment is vital."

The need to relate the students' learning needs and goals to employers' needs and the demands of the job market is extremely important. The growth trends in the U.S. Department of Labor's Occupational Outlook for the Mid - 1980's (1974) indicate that the need for professional and technical workers will grow faster than any other occupational group. Summaries of reports commissioned by the Southern Regional Education Board (1973) showed seven out of ten fields studied to be growing or suffering shortages. Enrollment in two-year institutions is growing faster than in four-year institutions. (National Center for Educational Statistics, 1977). State Advisory Councils on Vocational-Technical Education report that there are large numbers of graduates of vocational and technical education programs who are not finding employment in areas for which they have been trained. This indicates a gap between what students and educators see as necessary to a meaningful and rewarding career and what the business and industry community needs in order to operate effectively.

Most needs assessments show concern with learner needs or employee satisfaction and work attitudes. However, little has been done to assess the employers satisfaction with employees and the employer's training needs.

Hershkowitz (1974) selected five models which were considered to be the most advanced and comprehensive programs used by state education agencies for needs assessment. Those states were Kentucky, Maryland, New Jersey, Pennsylvania, and Virginia. The needs assessments were generally concerned with elementary and secondary education.

In an article, Warner (Hershkowitz, 1974, p 14) lists one criterion for determining the quality of an educational needs assessment as whether, "the strategy includes provisions for collecting data about student learning objectives into three categories: Perceptions of the community (including business & industry), educators, and the learners with regard to the relevance and importance of the objectives." Only the Maryland model included the business and industry community in the questionnaire.

In attempting to assess the need for new vocational/technical occupations programs, Walter J. Brooking (1978) suggested including the business community in the survey and made recommendations with regard to the type of information to be collected. "A commonly used method of determining the need for a new educational program is a direct canvass of potential employers in the geographical area to be served. A questionnaire requesting information pertinent to the program under study is an often used beginning for this activity ... The questionnaire should be designed to elicit information of this nature:

The types of positions available
The number of past, present and future employees
The opportunities for promotion
The prerequisites for employment positions
The characteristics sought in potential employees
The pay scale for initial employment
A description of duties to be performed."

In the San Diego Community College Districtwide Needs Assessment Report (1975), one of the stated goals was to provide a realistic basis for selection of programs and resources. The participants in the survey were residents of the community, current students, former students, community college staff, and community leaders. The business and industrial populations were not asked for their opinions of the job being done by the community college. The Community Needs Assessment, conducted by the Task Force on Assessment of Community Needs, Chemeketa Community College (1975) in Salem, Oregon was basically an assessment to determine the classes and services desired by the community residents. In this case, also, the business and industry communities were not included.

The Appalachian Developing Institutions Consortium Progress Report No. 5 (Roesler, 1974) is one of the few educational needs assessments that included a survey instrument that was sent to local businesses and industries. A goal of the consortium was to determine the educational interests of the students and the projected manpower needs of the area.

Using data gathered from these two perspectives, investigators then planned to develop appropriate vocational/technical/occupational education programs.

Talarzy's study (1975) included a questionnaire to local employers that used many attitude questions but did not directly ask the employers what kinds and levels of skills they hoped to find in local vocational/technical graduates. Still other research, such as the reports, abstracts, and models found in the Educational Resources Information Center (ERIC) system, (Phillips, 1975; Florida State Department of Education, 1976; McCaslin, 1976; Tuttle and Alexander, 1976; Wiant, 1976) are concerned with student goals, teacher accountability, and curriculum development but do not place much emphasis on the opinions and perceived needs of local businesses and industry. However, Tuttle and Alexander (1976) recommended that surveys of local industry be conducted in order that local vocational/technical facilities and community colleges do not train students for jobs that do not exist.

The urgent need to involve the business and industrial community in planning for more effective job training is evident as expressed by the studies and recommendations made by Stoehr (1976), Talarzy (1975), Tuttle (1976), and the Florida State Advisory Council on Vocational and Technical Education (1975). They all recommended more direct communication with employers. The local community college and the technical schools are some of the best facilities for subsistence training for local industry.

The Florida Advisory Council (1975, p.22) recommended that, "School districts and community colleges should perform the following: Maintain constant liaison with employers in the business and industry community and city, county, state, and federal agencies in order to identify job opportunities and descriptions." The Council also stated that, "A concerted effort should be made by the Division of Community Colleges and Vocational Education to determine the reasons vocational and technical education students often are not employed in jobs related to the field for which they have been trained. This data should then be used to restructure and update vocational and technical education offerings to make them more relevant in terms of the needs and interests of business and industry as well as the students themselves."

Background

An industrial climate audit was conducted by the Broward Industrial Board (BIB) and Broward Community College (BCC in January of 1977. The study explored the attitudes of industrial firms with regard to public vocational/technical training in Broward County. The survey showed that although 82.5% of the respondents would recommend the area as a location for corporate facilities, most felt that the employment market was not adequate for their needs as indicated by the responses to the following questions:
How would you rate the public education system in Broward County?

Very Good	3.4%
Good	20.3%
Average	28.8%
Poor	37.3%
Very Poor	10.2%

Are Broward high school graduates adequately prepared for your needs in:

	Yes	No
Basic skills, i.e., reading, spelling, math	33.9%	66.1%
Vocational skills	40.0%	60.0%

53.3% of the respondents have had to make special arrangements for training employees.

Even though critics of the investigation have found fault with the research design, the overwhelmingly negative response to the adequacy of training programs points to an area of great concern. This area of concern, namely the lack of well-trained employee candidates, was confirmed in personal interviews with the leadership of BIB and the Fort Lauderdale Area Chamber of Commerce.

Broward County had exhibited a high rate of unemployment (July, 1978). Yet, there are many job openings which go unfilled because of the apparent lack of qualified, local talent. It appears that there is a gap between persons looking for employment and those seeking employee candidates. The gap is caused by inadequate skill training. Because of the gap, employers have tended to look outside of Broward County, even outside of Florida, for people to hire. In the meantime, the local unemployment rate remains high.

The Broward Employment and Training Administration (BETA) funded the Broward County Employers Training Needs Assessment proposed by the Office of Institutional Research and Systems Planning of Broward Community College (BCC) for 1977-78. The grant enabled the hiring of a project coordinator, three interviewers, and a secretary. The Project was the first County-wide effort of its type which coordinated business, industry, government, and education efforts. The communication linkage formed between the public and private sectors in this endeavor is the first step toward the implementation of meaningful training programs to serve people seeking employment as well as those seeking employees.

The report presented here in the following pages defines the Broward County Needs Assessment in detail.

Summary

Needs assessment is a systematic procedure for determining the gaps between "what should be" and "what is." The gap is defined as a need. Desires, wishes, objectives, and goals are not needs, but discrepancies are. Conducting a needs assessment includes, first, determining "what should be" in terms of goals and standards. Second, "what is" is determined by an assessment of existing conditions. Then, analysis of the discrepancies between the goals, or standards, and the existing situation identifies the needs. Finally, some method is employed to set priorities for the needs, or discrepancies, identified.

Persons involved in planning will find needs assessment to be a valuable tool. The needs assessment may be applied to internal conditions within the institution or to the external service area. In addition to educational institutions, many social service agencies utilize needs assessment to identify and establish priorities for community needs. Often vocational directors and deans are required to substantiate community needs as part of the justification for new program approvals. 1) Witkin (1975) has summarized the major approaches to needs assessment; 2) The first step is to review existing procedures and select the techniques most appropriate in each individual case; 3) The needs assessment can be a useful tool for obtaining the necessary data.

Statement of the Problem

The problem was that although Broward County Employers had indicated that they have training needs which have not been met by local educational institutions, there had not been a scientific, county-wide assessment to document the existing needs and current educational offerings in order to determine which educational agencies might best fulfill the employers' needs.

Statement of Purpose

The BIB's industrial climate audit indicated a need to survey Broward County employers in depth with regard to their perceived needs for educational training programs. After thorough research and discussions with BIB and the Fort Lauderdale Area Chamber of Commerce, the purpose of the study was determined to be:

1. To determine the existing training needs of large businesses, industrial firms, and local units of Government in Broward County;
2. To determine which educational agencies in Broward County could best fulfill these needs; and
3. To inform the companies of the results in order to begin planning for the needed programs.

Major Issues

This is the first time that the educational sector of the community has worked with the private sector (industry and business) and the public sector (municipal governments) on a county-wide scale to determine training needs. Identifying the overall employer needs is the initial step in the attempt to meet the needs of the unemployed and under-employed of Broward County.

Research Method: The research method utilized in this study was the descriptive, personal interview approach.

Variables Studied: The variables studied and their operational definitions included the following:

Variable	Operational Definition
I. Sector	A. North (North of Oakland Park Blvd. to northern county line) B. Central (South of Oakland Park to Griffin Rd , Dania Cut-off Canal) C. South (South of Griffin Rd. to southern county line) See Appendix A
II. Company Type	A. Industrial B. Non-industrial or business C. Government
III. Employee Qualities	A. Basic skills (Reading, spelling, mathematics) B. Prior qualifications (Skill training, experience) C. Interest D. Personality E. Ambition F. Personal appearance G. Work attitude H. Responsibility I. Other
IV. Types of Positions	A. Self-report by respondent for current, one, two, and five year projections.
V. Recruitment Sources	A. Private employment agencies B. Florida State Employment Service C. Newspaper ads D. Employee referrals

		E.	College, high school, or technical school placement offices
		F.	Professional publications
		G.	Other public agencies
		H.	Other
VI.	Current Training	A.	Responses to questionnaire
VII.	Identified Training Needs	A.	See VI above
VIII.	Interest in Training Programs	A.	See VI above
IX.	Incentives	A.	Release time from work
		B.	Company payment
		C.	Possible subsequent promotion
		D.	None
		E.	Other
X.	Employment of Handicapped	A.	Responses to previous employment practices
XI.	Affirmative Action	XI.	See VI above.

Research Questions

The primary research questions were the following:

1. What are the current employee qualities, training incentives, and recruitment practices?

2. What are the existing training needs and interests of businesses, industrial firms, and local units of government by sector and types of positions?

3. Which educational agencies in the service area can best fulfill the identified needs?

4. What are the best feedback strategies to inform companies of the results in order to begin planning for the needed programs?

Definition of Terms

AIB	-	American Institute of Banking
Basic Skills	-	The ability to perform at a 12th grade level in the skills of reading, writing, and math
BCC	-	Broward Community College
BETA	-	Broward Employment and Training Administration
BIB	-	Broward Industrial Board
CETA	-	Comprehensive Employment and Training Act
DOT	-	Dictionary of Occupational Titles
ERIC	-	Educational Resources Information Center
Needs Assessment	-	A process for determining "what is" and "what should be" occurring and for placing priorities among them (Kaufman, 1972)
Occupational Education	-	Used synonymously with "vocational education" to designate programs preparing students with job entry level skills
OOH	-	Occupational Outlook Handbook
OJT	-	On-the-job Training
SFMA	-	South Florida Manufacturer's Association
SPSS	-	Statistical Package for the Social Sciences
Stratified Random Quota Sample	-	Elements, where each has an equal chance of being selected from a population which are selected to fill quotas from various stratifications
Supplemental Education	-	Courses designed to upgrade or retrain persons already employed in the field.

Assumptions

The following basic assumptions were made:

1. That there are training needs in existence which employers can identify and report;
2. That employers were candid and honest about their identified needs.

Limitations

The following limitations were beyond the control of the researchers and may have affected the results:

1. Personal interviews, by their face-to-face nature, may lead respondents to be less than totally candid which would result in assessment of more positive attitudes and less identification of training needs;
2. If non-respondents could have been polled, more needs might have been identified;
3. Even though appropriate sampling techniques were utilized, there is a possibility of a Type I error;
4. The employers were restricted within Broward County whereas employment of students is likely to be in the tri-county (Dade, Broward, and Palm Beach) area. Therefore, the tri-county area needs would be greater than those enumerated in the present study;
5. Cyclical changes in the tourist season impinge upon personnel and the number of persons employed;
6. Employer's projections cannot be validated until the year of the projection;
7. The scope of the questions had to be limited so that the interviews did not exceed one-half hour. Maybe there should have been additional questions to probe more details;
8. Interviewers may have erred in recording responses;
9. Keypunchers may have made errors even though the data were verified;
10. Demographic characteristics of respondents, such as sex and age, may have affected responses. Since only one personnel director in Broward County is black, race would not be a determining factor;
11. Only employers were interviewed. Interviewing employees may have resulted in different responses regarding training needs;

12. Position of the respondent in the company probably influenced the type of response obtained;

13. Establishing the fifty employee minimum disqualified greater numbers of Broward County employers who have many valuable opinions;

14. Employers were not asked to distinguish between training needs for entry level positions and for upgrading of current employees. The types of needs may be distinct and varied;

15. Employers were not asked to differentiate between skill levels of positions (unskilled, semi-skilled, skilled, professional). Again, the training needs would probably be varied.

How to Conduct a Needs Assessment

Once a decision is made to identify and assess needs, the following steps should be addressed:

Some problem must first exist before the decision to conduct a needs assessment should be undertaken. The needs assessment, or any research project, should not be undertaken merely for the sake of research. It should be utilized only if it is deemed the best approach to solving an existing problem. The problem, or need, may be thought of as a "gap" in "what is" and "what should be" or as a mission information linkage regarding program development. The problem should be stated in a single, concise, declarative statement which leads to the purpose of the needs assessment.

The purpose indicates what the investigator intends to do about the problem. This includes the objectives of the study and the major variables to be assessed. A needs assessment primarily utilizes the descriptive research method. The variables to be assessed should be stated and operationally defined as "grade point average." Research questions or hypotheses follow. Research questions are major questions for which the investigator will be finding answers so that her/his purpose may be accomplished. Hypotheses are only used in experimental or quasi-experimental studies where the researcher wishes to infer from a random sampling to the population.

Methodology includes the actual procedures followed. First the group to be assessed must be identified as the population from which a sample, or several samples, will be drawn. An example of a population is all business and indsutry in Broward County with 50 or more employees in the fall of 1977. Then the sample and the method for its selection should be stipulated. For example, the sample may be a random sampling of 500 businesses and industries in Broward County with 50 or more employees in the fall of 1977. Samples may be stratified to more closely approximate the population from which they are drawn. Stratifications should be specified and could include strata, such as geographic location, product type, and size of company.

Procedures for data collection are part of the methodology. Sufficient explanation should appear so that another individual could replicate the study. Before a questionnaire survey instrument is to be prepared, the investigator should check existing sources (Buros, 1965; Chun, et. al., 1976; Robinson, et. al., 1969) first to ascertain if there is a valid and reliable instrument which could be used. If not, a questionnaire should be developed using the review of current literature and interviews with experts in the field (employers, educators) for the first draft. The instrument must then be pilot-tested on a group similar to the sample group and revised. The validity and reliability factors must be determined.

A questionnaire captures information only as valid and reliable as the questions included in it. Poor questions will lead to poor results containing misleading information.

Procedures for treating data must be determined prior to the actual needs assessment. The treatment of data dictates the format in which data is ordered. Descriptive statistics, such as frequency tabulations, percentages, histograms, bar graphs, pie charts, and tables, will be appropriate for use in treating data found in most needs assessments where the purpose is to describe an existing situation with a nonrandom or a saturation sampling. Inferencial statistics utilizing tests of significance (t-test, analysis of variance) are only used if the investigator plans to infer from the random sample to the population.

Results should be displayed in concise, tabular form so that conclusions can be drawn readily. The conclusions specifically list the needs identified in the assessment. The significance of those needs to the educational institution and to the business and industry committees should be fully explored. Recommendations for action should follow and indicate specifically who should be responsible for their execution. These recommendations then become the goals and objectives for the program and staff development. As Resnick (1978, p.27) says, "The point is not to collect data. The point is to use the data collected to identify the need areas and go on to establish goals for the development program."

II. Methodology

All employers (830) with fifty or more employees in the fall of 1977 were included in the population. Identification of the entire population is difficult, especially in a large, fast growing county such as Broward. The list of employers was obtained from the State Department of Commerce. Confidentiality of the list was assured.

Five-hundred-and-forty was chosen as the total sample size with the hope there would be at least 384 completed, usable interview questionnaires. The 384 sample size is required for a 0.05 level of significance with 5% precision, as determined by Backstrom and Hursh (1963) and Krejcie and Morgan (1970). A stratified random sampling of the 540 was selected on the basis of the following:

Geographic Location	- (North, Central, and South sector of the county paralleling the North, Central and South campus regions)
Company Type	- Industrial (21.5%) - Non-industrial (75.7%) - City Government (2.8%)

The following matrices indicated the actual stratifications in the community by frequencies and percentages and the application of those percentages to the sampling:

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Sample Selection

Total Employers in Broward County
with 50 or more employees

County Sector	Manufacturing	Non-Manufacturing	City Government
North	78	237	9
Central	51	281	7
South	49	113	5
Number for Sample Selection - (Sample Number 540)			
North	51	154	6
Central	33	182	5
South	32	73	4
Number of Completed Interviews N=400			
North	48	107	4
Central	22	162	5
South	20	30	2
Percentage of Total			
North	9.4%	28.5%	1.1%
Central	6.1%	33.8%	1.0%
South	5.9%	13.6%	.6%

Failure to Complete Interviews

Total Population = 830 employers

400 completed interviews = 48.5% of total population
430 rejections = 51.5% of total population

Reason	Actual Number	Percentage of Population
Outside of Broward County	36	4.3%
Refused	185	22.2%
Too Small	55	6.6%
Could Not Locate	97	11.6%
Duplicates	25	3.0%
Not Scheduled	31	3.7%
Private Residence	1	0.1%
	430	51.5%

Actual rejections (refusals and not scheduled): 67, or 8.1%

Procedures for Data Collection

A coordinator and three interviewers were hired by the Director of Institutional Research and Systems Planning to conduct the study.

Orientation

During the first few months, the project workers spent most of their time orienting themselves to Broward Community College, its staff, and the community it serves. They also began an exhaustive study of the literature for material regarding needs assessment and interviewing techniques. The orientation phase proved to be invaluable later in the study when the project workers were required to answer numerous questions from respondents with regard to Broward Community College and its programs.

Interviewer Training

Interviewers were required to write papers concerning the interviewing process in order to familiarize themselves with the techniques and to learn the approach to a library search and the referencing of bibliographic materials. An interviewer training session was developed by the Director of Institutional Research and Systems Planning.

The training session involved discussion of the various aspects of the interview and questionnaire design. Beginning with an explanation of the purposes of interviews and their value to research, the discussion then centered on the types of interviews, the structure of the questionnaire design to elicit the necessary information, the qualities required of the interviewer and how to go about recording the responses with as little bias as possible. All of these aspects of the interview and questionnaire design are discussed in detail in Chapter 1.

After the interviewers had an understanding of the use and structure of questionnaire interviews in general, the training session turned to the specific questions to be used in the needs assessment. Drafts of the questionnaire were finalized by the Director of Institutional Research and Systems Planning, the BIB, and department chairpersons from Broward Community College with approval from BETA staff.

The final phase of this training was a session of role playing, in which the project coordinator and interviewers took the roles of employers and interviewer, using the actual needs assessment survey instrument, asked and answered the questions. This section of the training was most valuable as it gave all staff members practice in using the instrument and an opportunity to see if the structure of the questions were appropriate and easy to understand. Through this process the questionnaire was again revised, and the interviewing staff became quite familiar with the wording and meaning of each item.

An interview is a directed conversation with a person or persons that is designed to elicit certain predetermined kinds of information. Borg (1963) states the three (3) main purposes of an interview as: "1) An exploratory device to help identify variables and relations, to suggest hypotheses, and to guide other phases of the research; 2) A main instrument in research; 3) A supplement to other methods: to follow-up unexpected results, to validate other methods, and to go deeper into the motivations of respondents and their reasons for responding as they do."

Social science research usually includes documentary sources, observations, mail questionnaires, and interviews as tools for gaining useful information. The interview is the most valuable tool of social science research. The advantages of a personal interview, as opposed to a mailed questionnaire, include: 1) Permits greater depth; 2) Permits probing to obtain more complete data; 3) Makes it possible to establish and maintain rapport with respondent or at least determine when rapport has not been established; 4) Provides a means of checking and assuring the effectiveness of communication between the respondent and the interviewer." (Borg, 1963). Disadvantages also exist. "Interviews are costly, time consuming, and inconvenient. If the researcher takes advantage of the interview's adaptability, she/he introduces the problem of subjectivity and personal bias. Eagerness of the respondent to please the interviewer, a vague antagonism that sometimes arises between the interviewer and the respondent, and the tendency of the interviewer to seek out answers that support her/his preconceived notions all complicate this method. The thorough training required of the interviewer to offset these disadvantages becomes an additional burden, increasing the cost and time factors." (Borg, 1963)

The final success of the interview depends upon the training of the interviewer to be sensitive to the entire dynamic system of interviewing, and upon the development and structure of the survey instrument. The selection of the interviewers is dependent upon the goals of the study. Interviewer trainees must be made to feel self-confident but not over confident. For some forms of interviewing the interviewer may require formal training, however, for the survey interview, the interviewer may need no professional training and little knowledge of research (Richardson, 1965). Some form of training should be provided to train the interviewer on procedures to be used in the particular study and to provide the interviewer with the necessary attitudes and motivation. Some specific training methods are: 1) Written instructions; 2) Role-playing; 3) Cases, actual interviews and group discussions; 4) Interpersonal relations. Skill practice in interviewing is more effective when done in a group. The learner must feel free to make mistakes as well as achieve success.

She/he must also be able to see and know the effects of her/his behavior if she/he is to weed out ineffective behavior. "Getting feedback is a part of all intelligent practice" (Kahn, 1967).

The practice of role playing involves one member of the group playing the part of the respondent, identifying herself/himself with some actual person whom she/he knows. The trainee playing the interviewer role gets the benefits of practicing the actual works and techniques she/he will use in the interview situation. The interviewer prepares for her/his role by thinking through her/his objectives. The respondent is told what kind of situation is to be played and her/his role is discussed. The remainder of the group acts as observers and takes note of good and poor techniques. The actual role playing should be brief, about ten or fifteen minutes.

It is a good practice to keep the time span between interview training and data collecting as short as possible. Motivation will remain high and instruction will be fresh in the minds of the trainees if the interviews begin as soon as possible after completion of the training.

In the techniques of interviewing there are many characteristics and situations to be considered. The following are some considerations: 1) It is important to gain respondent cooperation. Prior to the interview, it is advisable to contact the respondent by telephone, letter, or personal visit. Setting up the appointment may allow the interviewer to select the time and place; 2) Help the respondent to relax and make her/him feel as comfortable as possible (eg. doctors have patients go to the office rather than in an antiseptic examination room). The ideal situation is one in which only the interviewer and respondent are present (eg. Army installation; veterans complain more of unfair treatment by the public if the wife is present in the interview). The arrangement of furniture can work for or against the interview. It is important not to put people in uncomfortable surroundings, such as a factory worker in the President's office; 3) The actual questioning is an important consideration. After opening remarks the interviewer should try to stay directly with the interview questions. The pace of the questioning should be adapted to the respondent's pace. The interviewer should not be overly probing or the respondent may feel cornered and clam up; 4) Listening is one of the most valuable qualities of a good interviewer. Some pauses may prompt the respondent to give additional information, but it is best to avoid prolonged silences. The interviewer should not begin to think of how she/he will ask the next question, but rather, listen to the respondent's answer without interruption; 5) It is relevant to note what the respondent does not say. Non-verbal behavior can indicate the respondent's attitude and if she/he is nervous.

Methods of recording the interview and sources of error and bias are also considerations in the personal interview. Some methods of recording the interview are: 1) Write-up the interview from memory. Studies comparing taped interviews with memory show that only 40% of the information was retained by memory and that 25% of the statements attributed to the respondent were not hers/his. 2) Field ratings. The interviewer rates the respondent's replies on the dimension that is measured on the form. This method is used by professionals. 3) Field coding. The respondent's answers are placed in predetermined categories. One problem with this method is the lack of reliability checks. 4) Verbatiom note-taking. The final answers, however, may contain less than 50% of what was actually said. 5) Mechanical recording. When using audio or video taping it is essential to let the respondent know that she/he is on tape. While these are some of the best ways to record total responses in an interview, they may inhibit the respondent.

Error and bias must be considered when using the personal interview to collect information. Some sources of error include: 1) The interviewer's prior experience and training; this may cause her/him to misunderstand the meaning or perceived aim of the questions; 2) Interviewer errors or biases in understanding the question, since she/he usually is not the one who designed the questionnaire; 3) Error in stating the question. It is important to remember that the aim is to elicit information from the respondent; not to encourage the respondent to say what the interviewer thinks is right or wants to hear; 4) Interviewer error in perceiving the response (No two people will have the same meaning for any given question or answer. These problems cannot be changed, but the interviewer should be aware that they exist); 5) Respondent errors in recall; 6) Respondent biases in response. Social factors such as sex, age, race, and religion can effect the respondent and her/his tendency to give a "socially acceptable" answer; 7) Interviewer biases or errors in recording the response. The responses must be recorded in sufficient detail. Errors sometimes occur when the interviewer must code responses into categories.

The questionnaire itself should be concerned with obtaining data that is pertinent to the study. Kerlinger (1965) lists the following questions as criteria for question-writing:

1. Is the question related to the research problem and objective?
2. Is the type of question the right and appropriate one?
3. Is the item clear and unambiguous?
4. Is the question in any way leading?
5. Does the question demand knowledge and information that the respondent does not have?
6. Does the question demand personal or sensitive information that the respondent may resist?
7. Is the question loaded with social desirability?

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Borg (1963) discussed the importance of the interview structure. 1) "Unstructured interviews - the client - centered counseling technique of Carl Rogers illustrates the unstructured approach, giving the respondent broad freedom to express himself in his own way and his own time. The interviewer may have a general or specific objective which he feels can best be met without imposing a structure on the respondent. Usually the information involved is of a highly personal and potentially threatening nature. Of the three interview structures, this one is the most vulnerable to subjective bias or errors of experience. 2) Semistructural interviews - these are built around a core of standard questions from which the interviewer branches off to explore in depth. Again, accurate and complete information is desired with the additional opportunity to probe for underlying factors or relationships which are too complex or elusive to encompass in more straight forward questions. Semi-structured interviews require more training and skill both to probe at significant points and to avoid biasing tendencies . 3) Structural interviews - the interviewer follows a well-defined structure resembling the format of an objective questionnaire, allowing clarification and elaboration within narrow limits. These tend to be factually oriented, aimed at specific information, and relatively brief. Structured interviews are suitable when accurate and complete information from all respondents is important and when the type of information sought fits readily into a structured inquiry."

The questions themselves will fall into one of these four types: 1) Open - ended questions or essay questions. 2) Close - ended questions or multiple choice questions. This type of question usually produces a greater uniformity of response and easier analysis. 3) Projection questions. These are hypothetical questions about "other people" which assume that the respondent will project her/his own feeling into the response. Eg. "How do most of the girls in the office feel about the supervisor?" 4) Leading questions. These are poor questions, leading the respondent toward a certain answer. Eg. "You're not in favor of ___________, are you?" The wording of the questions should be simple and short in order to avoid confusion.

Interviewing Procedures

The general procedures for the interviewing process are enumerated below:

1. Obtained verbal commitment of community groups (in this case, the Broward Industrial Board and the Fort Lauderdale Area Chamber of Commerce);
2. Obtained documented commitment in the form of a letter to employers from the supporting community groups. (See Appendix B);
3. Obtained a mailing list of the population;
4. Selected the stratified random sampling from the population to reflect its components in a more manageable size;
5. Mailed the BIB/Chamber letters to employers introducing the project and the project director's name;
6. Sent a follow-up letter from the project director to the sample of employers introducing the name of the interviewer who would call them. (See Appendix C);
7. Interviewers phoned employers to set up times for the personal interviews and sent copies of the occupational job titles asking for current, one-two, and five-year projections to be completed in advance and available for the interviewer to retrieve at the time of the interview. (See Appendix D & E);
8. Conducted personal interviews of approximately one-half-hour duration; and
9. Thank-you letters were sent to the interviewed employers, including follow-up letters requesting the occupational job titles from those who had not completed and returned them previously. (See Appendix F, G, H).

Instrumentation

The major variables included in the study were determined as a result of review of the literature and discussions with representatives of the Broward Industrial Board (BIB), the Fort Lauderdale Area Chamber of Commerce, and the Broward Employment and Training Administration (BETA). From the variables and research questions, a draft of the questionnaire was developed for use in personal interviews. A list of occupational job titles for each type of company was developed also.

The questionnaire and job titles were given to BCC Department Chairpersons in the respective occupational fields for input regarding validity. Revisions were made based upon their knowledge. The revised job lists and questionnaires then were pilot-tested.

Pilot-testing was conducted with randomly selected employers stratified in the same manner as the sampling distribution for the survey itself. The pilot test was utilized to validate both the instrument and the methodology. Revisions again were made in the occupational job titles listings and in the content and wording of questionnaire items. Even though response items appear in the questionnaire, they were to promote ease of coding by the interviewer rather than to inhibit open-ended responses of employers. The instrument was devised to require no more than half-an-hour interviewing time. The questionnaire appears in Appendix I.

Below is a brief description of each major variable covered in the questionnaire with an explanation of how it was handled:

	Variable	Response
I.	Position in Company	Self-response
II.	Employee Qualities	Self-response
III.	Adequacy of Present Employee Preparation	Yes-No Multiple choice response
IV.	Anticipated New Products or Services within 5 years	Self-response
V.	Anticipated Cut-backs within 5 years	Self-response
VI.	Difficulty Filling Positions	Self-response
VII.	Recruitment Sources	Self-response
VIII.	Orientation of New Personnel	Self-response
IX	Supplemental Training	Self-response

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	Variable	Response
X.	Specific Training Needs not being met	Self-response
XI.	High Turnover	Self-response
XII.	Employee Advancement	Self-response
XIII.	Filling Management Level Positions	Multiple choice
XIV.	Interest in New Training Programs	Yes-No Multiple choice response
XV.	Preference of Training Sites	Multiple choice
XVI.	Incentives for New Programs	Self-response
XVII.	Hired Handicapped	Yes-No Multiple choice response
XVIII.	Willingness to Participate in Special Training Programs for Handicapped	Multiple choice
XIX.	Affirmative Action	Yes-No Multiple choice response

Treatment of Data

The data were analyzed by means of both descriptive and inferential statistics. Descriptive statistics consisted of frequency counts, modes, and crosstabulations using the Statistical Package for the Social Sciences (SPSS) computer program. Graphic presentation of data in the form of charts and matrices was utilized for further description of questionnaire responses and the mapping of existing educational programs in the area. The analysis of variance was used to determine significance at the 0.05 level of significance. A panel of experts assisted in selecting feedback strategies.

Mapping the Training Needs with Educational Agencies in the County

Upon completion of the survey, all training needs were compiled and analyzed. Many of the courses or programs needed by employers were already being offered at public and private schools in the area. In order to inform employers of existing programs and where they were being taught, an investigation was made of the course offerings and content of each school. This information was obtained by calling or writing to the schools to request program listings. The School Board of Broward County was the only educational agency not able to supply full information of their vocational/technical program offerings. All other programs available were received in the form of school catalogs and brochures. A listing of School Board programs was obtained from the State Division of Vocational Education. After analyzing the information received, the courses were organized by major disciplines and a chart was devised to send to participating employers showing where programs were being taught in both public and private schools (See Appendix J).

III. Results

The objectives of the study included interviewing a minimum of 384 major businesses in the county. A stratified random quota sampling was selected as described in Section II. When all interviewing was completed, all of the 830 major employers in Broward County had been contacted for an appointment. A total of 400 completed questionnaires were obtained which provided the information base for the study.

Tables 1 and 2 (Sample Description) detail the frequency and percentage distribution of survey respondents by discipline (Table 1) and by occupational category. The largest number of survey respondents were in the Distributive occupations.

The following section describes in detail, the responses to each questionnaire item:

Question #1 refers to the interviewee's position in the company. In order to obtain a consistent point of view, the project workers attempted to interview the personnel manager of each company. Many companies, however, do not have a personnel manager, or the duties of this position were carried out by another member of the management. Table 3 shows the distribution of position titles by frequency and percentage. The most frequently occurring "other" responses are shown in Table 4.

Question #2 asks for the most important quality that employers look for in employee candidates. Although response options were included on the questionnaire for easier coding, this was a self-response item. Table 5 shows the response by frequency and percentage distribution. The most frequent responses were prior qualifications (skill training, experience) and others. The most frequent "other" responses are shown in Table 4. Table 6 shows the majority response to this item by occupational category.

Question #3 is a multiple choice item. This question was asked in an attempt to learn the adequacy of present employees. Table 7 shows the responses by frequency and percentage. The majority of employers indicated that their present employees are adequately prepared. However, a good deal was learned about employers' attitudes in asking this question. Indirect information received during discussions of this question with employers is dealt with in the Observation Section of this report.

Question #4 & 5 ask the employer about anticipated new products or services within the next 5 years. Table 8 shows the frequency and percentage distribution. The majority of employers expect such expansion to occur and Table 8 also lists the new titles which occurred most often.

Table 1. Sample Description by Discipline

DISCIPLINE	FREQUENCY	PERCENTAGE
AGRICULTURE OCCUPATIONS	10	2.5
DISTRIBUTIVE OCCUPATIONS	183	45.7
HEALTH OCCUPATIONS	35	8.7
HOME ECONOMICS OCCUPATIONS	2	.5
OFFICE OCCUPATIONS	14	3.5
TRADE & INDUSTRIAL OCCUPATIONS	132	33.0
PUBLIC SERVICE OCCUPATIONS	24	6.0
TOTAL CASES	400	99.9
MODE	22.0000	Distributive Occupations

Table 2. Sample Description by Occupational Category

OCCUPATIONAL CATEGORY	FREQUENCY	PERCENTAGE
AGRICULTURE		
Nurseries/Florists/Landscapers	2	.5
Taxidermists	1	.2
Agriculture Supplies & Services	2	.5
Golf Courses/Country Clubs	4	1.0
DISTRIBUTIVE		
Auto Dealerships/Auto Leasing	22	5.5
Banks/Savings & Loans/Commercial	17	4.2
Stock Brokers	2	.5
Retail Grocers/Wholesalers	14	3.5
Food Services	1	.2
Hotels/Restaurants/Nightclubs	64	16.0
Insurance/Property Management	14	3.5
Petroleum Services	7	1.7
Real Estate/Land Development	4	1.0
Race Track/Amusements	1	.2
Trucking/Moving/Delivery Services	7	1.7
Department Stores/Retail Businesses	28	7.0
HEALTH		
Medical/Hospital	33	8.2
Mortuary Services	1	.2
HOME ECONOMICS		
Maid/Cleaning Services	2	.5

Table 2. Sample Description by Occupational Category

OCCUPATIONAL CATEGORY	FREQUENCY	PERCENTAGE
OFFICE		
Accounting/Computer/Communications	10	2.5
Employment Services	1	.2
Law Firms	3	.7
TRADE & INDUSTRIAL		
Electrical A/C Repairs	1	.2
Airlines	3	.7
Construction	21	5.2
Architectural Occupations	1	.2
Pool Maintenance	1	.2
Laundries/Dry Cleaning Services	2	.5
Printers/Newspapers/Photographers	7	1.7
Ship Builders	4	1.0
Manufacturing/Machine Shops	93	23.1
Energy Sources/Utilities	1	.2
Radio Stations	2	.5
PUBLIC SERVICE		
Security	4	1.0
Schools/Universities	6	1.5
CITY GOVERNMENT	14	3.5
TOTAL	400	99.0

Table 3. Response to Position in Company

QUESTIONNAIRE ITEM	RESPONSE	
What is your position in the company?	Frequency	%
President or Vice President, General Manager	70	17.5
Personnel Manager	91	22.7
Public Relations	0	0.0
Training Director	1	0.2
Other	238	59.4

Table 4

Most Frequent "Other" Responses

Item #1 What is your position in the company?

- Managers
- General, District or Area Managers
- Treasurers/Comptrollers
- Administrators
- Assistant Managers
- Secretaries
- Owners

Item #2 What is the most important quality you look for in employee candidates?

- Dependability
- Stability
- Honesty
- Reliability
- Willingness to work and learn

Item #3 What position(s) will be needed?

- Computer Personnel
- Engineers
- Sales
- Nurses (LPN, RN, Aides, etc.)
- Secretarial (all clerical)
- Mechanics
- Technicians (Electronic)
- Machinists
- Assemblers

Item #4 What position(s) will be changed?

- Clerical (all)
- Nurses Aides
- Retail Sales
- Keypunch
- Restaurant Personnel

Item #5 What are the positions and what is the most prevalent reason for the difficulty in filling each position?

- Office Personnel (all, poor skill training)
- Restaurant Personnel (all, transient)
- Nurses (all, poor pay scale, poor skills)
- Sales (transient)
- Management (not responsible)
- Mechanics (poor pay scale, poor skills)
- Keypunch (poor hours)
- Electronic Technicians (lack of applicants)
- Programmers (poor hours)
- Machinists (poor skills)

Item #6 What recruitment sources do you use to fill positions?

BETA
Walk-ins
Word of mouth
Minority groups
Schools
Publications
Radio

Item #7 Who currently orients your new personnel before they begin the job?

Managers
Plant Managers
General Managers
Office Managers
Production Managers

Item #8 Who currently conducts supplemental training?

On-the-job training
Managers
Manufacturer's Representatives
Seminars
A.I.B. (American Institute of Banking)

Item #9 What are the position(s) and what skills are needed for each?
(1=Personal, Behavioral, 2=Technical, 3=Managerial)

Management	3
Waitresses	2
Machinists	2
Nurses	1, 2, 3
Secretarial	1, 2
Electronic Technicians	2
Sales	3
Tool & Die	2
Computer Personnel	2
Home Health Aides	1, 3

Item #10 What are the position(s) and what is the most prevalent reason for the turnover in each position?

Restaurant Personnel - Transient, poor attitude
Sales - Transient, lack of loyalty
Secretarial - Transient, poor pay scale
Nurses - Poor pay scale, lack of loyalty
Bank Tellers - Poor pay scale, transient

Item #11 How do employees advance within the company?
- Job bidding or posting
- Employee initiative, motivation or interest
- Little or no opportunity for advancement
- Advance in salary only

Item #12 Where would you prefer that this training take place?
- Depends on courses offered
- Rotating among hospitals
- Centrally located

Item #13 What incentives do you currently offer for employees taking further training?
- Additional pay increases & bonuses
- Tuition
- Better position

Item #14 What types of incentives would you offer?
- Depends on course
- Part tuition
- Undecided
- Commission
- Bonus

Item #15 Have you ever hired any handicapped persons?
- Physical handicaps
- Deaf
- Missing limbs
- Blind
- Mental handicaps
- Epileptic

Table 5. Response to Employee Qualities

QUESTIONNAIRE ITEM	RESPONSE	
What is the most important quality you look for in employee candidates?	Frequency	%
Basic Skills	13	3.2
Prior Qualifications	126	31.5
Interest	8	2.0
Personality	17	4.2
Ambition	8	2.0
Personal Appearance	21	5.2
Work Attitude	29	7.2
Responsibility	11	2.7
Other	167	41.7
Total Cases	400	100.0

Table 6. Response to Employee Qualities by Occupational Category

WHAT IS THE MOST IMPORTANT QUALITY YOU LOOK FOR IN AN EMPLOYEE CANDIDATE?

	Basic Skills (Reading, Spelling, Mathematics)	Prior Qualifications (Skill Training Experience)	Interest	Personality	Ambition	Personal Appearance	Work Attitude	Responsibility	Other
AGRICULTURE									
Nurseries/Florists/Landscapers									*
Taxidermists									*
Agriculture Supplies and Services									*
Golf Courses/Country Clubs		*				*	*		*
DISTRIBUTIVE									
Auto Dealerships/Auto Leasing									*
Banks/Savings & Loans/Commercial		*							
Stock Brokers									*
Retail Grocers									*
Food Services			*						
Hotels/Restaurants/Night Clubs									*
Insurance/Property Management									*
Petroleum Services									*
Real Estate/Land Development		*							
Race Track/Amusements									*
Trucking/Moving/Delivery Services		*							*
Department Stores/Retail Businesses									*
HEALTH									
Medical/Hospital									*
Mortuary Services		*							
HOME ECONOMICS									
Maid/Cleaning Services		*							

Table 6. Response to Employee Qualities by Occupational Category

WHAT IS THE MOST IMPORTANT QUALITY YOU LOOK FOR IN AN EMPLOYEE CANDIDATE?

	Basic Skills (Reading, Spelling, Mathematics)	Prior Qualifications (Skill Training Experience	Interest	Personality	Ambition	Personal Appearance	Work Attitude	Responsibility	Other
OFFICE									
Accounting/Computer/Communications									*
Employment Services									*
Law Firms		*							
TRADE AND INDUSTRIAL									
Electrical/A/C Repairs		*							
Airlines		*							
Construction		*							
Architectural Occupations		*							
Pool Maintenance						*			
Laundries/Dry Cleaning Services							*		
Printers/Newspapers/Photographers		*							
Ship Builders		*							
Manufacturing/Machine Shops									*
Energy Sources/Utilities									*
Radio Stations									*
PUBLIC SERVICE									
Security									*
Schools/Universities		*							
CITY GOVERNMENT		*							

Table 7. Response to Adequacy of Employee Preparation

QUESTIONNAIRE ITEM	RESPONSE					
Are your present employees adequately prepared in?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Basic Skills (Reading, Spelling, Maths)	323	80.7	76	19.0	1	0.2
Technical Skills	314	78.5	66	16.5	20	5.0
Management Skills	288	72.0	103	25.7	1	0.2
Work Attitude	314	78.5	81	20.2	5	1.2
Sense of Personal Responsibility	306	76.5	87	21.7	7	1.7
Ability to Get Along with Co-workers	378	94.5	19	4.7	3	0.7

Table 8. Response to Anticipated New Jobs

QUESTIONNAIRE ITEM	RESPONSE					
Do you anticipate any new products or services within the next 5 years that will create a need for new job positions?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Projected Experience Increased Job Demand Due to Changes in Products or Services (Based upon Five-Year Projections) Computer Personnel Engineers Sales Personnel Nurses/Nurses Aides Secretaries Mechanics Electronic Technicians Machinists Assemblers	187	46.7	210	52.5	3	0.7

Questions #6 & 7 indicate that only 2 types of businesses anticipate cutbacks in personnel within the next 5 years. Table 9 lists these businesses and the position titles which will be modified or eliminated. Table 11 shows these responses by occupational category.

Questions #8 & 9 show that 81.0% of the employers interviewed have had difficulty filling positions (Table 10). Table 12 lists the most frequently occurring difficult positions and the reasons for the difficulty in each case.

Question #10 asks the interviewee what recruitment sources are used to fill open positions. Table 13 shows the frequency and percentage distribution answer to each response option (response options were included only for the use of the interviewer in coding responses). This table indicates that most employers rely on newspaper advertising to fill open positions. Table 14 shows all the recruitment sources used by occupational category. The most frequent "other" responses are listed in Table 4.

Question #11, Table 15 indicates by frequency and percentage, that most new employees are oriented to their new job activities by a department head or supervisor. Table 16 shows who conducts orientation training within each occupational category. Table 4 lists most frequently occurring "other" responses.

Question #12 & 13 determined that 78.0% of the companies interviewed conduct supplemental training to upgrade employees (Table 17). Tables 18 and 19 show that most employers within each occupational category have department heads or supervisors conduct this training.

Questions 14 & 15 indicate that 12 of the occupational categories surveyed feel that they have specific training needs that are not being met (Table 20). Table 20 lists these positions and the reasons for the difficulty in each case.

Questions #16 & 17 show that the majority of respondents have experienced high turnover of employees (Table 21). Table 21 shows the most frequently occurring positions and the reason for the high turnover in each case.

Question #18 indicates that 64.0% of all employers interviewed promote employees on the basis of performance evaluation (Table 22). In Table 23, the chart shows the responses to each option by occupational category.

Question 19, Table 25 shows that 90.7% of all employers interviewed try to fill management level positions from within whenever possible. Table 11 lists the responses to this question by occupational category.

Table 9. Response to Anticipated Cutbacks

Do you anticipate any cutbacks in products or services that will modify or eliminate positions within the next 5 years? Those businesses responding "Yes":

Descriptive Title
Mortuary Services
Energy Sources/Utilities

Table 10. Response to Difficulty in Filling Positions

QUESTIONNAIRE ITEM	RESPONSE					
	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Are there any positions that you have had difficulty in filling?	324	81.0	76	19.0	0	0.0

Table II. POSITIVE SURVEY RESPONSES
BY OCCUPATIONAL CATEGORIES

	Anticipated Cutbacks within 5 years	Conduct Supplemental Training to Upgrade Employees	Any Specific Training Needs not being Met	Any Positions with High Turnover	Fill Mgmt. Level Positions from within	Willing to Offer Incentives for New Training Program	Have Hired Handi-capped	Willing to Participate in Special Training for Handicapped	Affirmative Action Participant
AGRICULTURE									
Nurseries/Florists/Landscapers		*		*	*		*	*	
Taxidermists					*		*		
Agriculture Supplies & Services		*	*	*	*	*		*	*
Golf Courses/Country Clubs		*		*	*				
DISTRIBUTIVE									
Auto Dealerships/Auto Leasing		*		*	*	*	*		
Banks/Savings & Loans/Commercial		*		*	*		*	*	*
Stock Brokers		*	*		*		*	*	*
Retail Grocers/Wholesalers		*		*	*		*	*	*
Food Services		*		*	*			*	
Hotels/Restaurants/Night Clubs		*		*	*		*		
Insurance/Property Management		*		*	*	*			*
Petroleum Services		*		*	*				*
Real Estate/Land Development		*			*			*	*
Race Track/Amusements		*	*	*	*	*	*		
Trucking/Moving/Delivery Services		*		*	*			*	*
Department Stores/Retail Businesses		*		*	*		*	*	
HEALTH									
Medical/Hospital		*	*	*	*	*	*	*	*
Mortuary Services	*	*		*	*		*	*	
HOME ECONOMICS									
Maid/Cleaning Services		*	*	*	*		*	*	

Table 11. POSITIVE SURVEY RESPONSES BY OCCUPATIONAL CATEGORIES

	Anticipated Cutbacks within 5 years	Conduct Supplemental Training to Upgrade Employees	Any Specific Training Needs not being Met	Any Positions with High Turnover	Fill Mgmt. Level Positions from within	Willing to Offer Incentives for New Training Program	Have Hired Handi-capped	Willing to Participate in Special Training for Handicapped	Affirmative Action Participant
OFFICE									
Accounting/Computer/Communications		*		*	*	*	*	*	*
Employment Services			*	*		*	*	*	*
Law Firms			*	*		*			
TRADE AND INDUSTRIAL									
Electrical/A/C Repairs		*		*	*				
Airlines		*		*		*	*		
Construction		*			*		*	*	*
Architectural Occupations					*		*	*	*
Pool Maintenance		*		*	*		*		
Laundries/Dry Cleaning Services		*	*	*	*	*	*	*	
Printers/Newspapers/Photographers		*		*	*		*	*	
Ship Builders		*	*	*	*		*	*	
Manufacturing/Machine Shops		*		*	*	*	*	*	*
Energy Sources/Utilities	*	*		*	*	*	*	*	*
Radio Stations		*	*	*	*		*	*	*
PUBLIC SERVICE									
Security			*	*	*		*	*	
Schools/Universities		*	*	*	*		*	*	*
CITY GOVERNMENT		*		*	*	*	*	*	*

Table 12

Positions Most Difficult To Fill

Position	Reason
Office Personnel	Poor Skills
Restaurant Personnel	Transient
Nurses	Poor pay, poor skills
Sales	Transient
Management	Irresponsible
Mechanics	Poor pay, poor skills
Keypunch Operators	Poor hours
Electronic Technicians	Lack of applicants
Programmers	Poor hours
Machinists	Poor skills

Table 13. Response to Recruitment Sources

QUESTIONNAIRE ITEM	RESPONSE					
What recruitment sources do you use to fill positions?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Private Employment Agencies	98	24.5	301	75.2	1	0.2
Florida State Employment Services	168	42.0	231	57.7	1	0.2
Newspaper Ads	344	86.0	55	13.7	1	0.2
Employee Referrals	142	35.5	257	64.2	1	0.2
College, High School, or Technical School Placement Offices	118	29.5	281	70.2	1	0.2
Professional Publications	31	7.7	368	92.0	1	0.2
Other Public Agencies	14	3.5	385	96.2	1	0.2
Other	92	23.0	307	76.7	1	0.2

Table 14. Response to Recruitment Sources by Occupational Category
WHAT RECRUITMENT SOURCES DO YOU USE TO FILL POSITIONS?

	Private Employment Agencies	Florida State Employment Service	Newspaper Ads	Employee Referrals	College, H.S. or Technical School Placement Office	Professional Publications	Other Public Agencies	Other
AGRICULTURE								
Nurseries/Florists/Landscapers	*	*						
Taxidermists			*	*	*			
Agriculture Supplies and Services	*	*	*	*	*			*
Golf Courses/Country Clubs			*	*	*			
DISTRIBUTIVE								
Auto Dealerships/Auto Leasing			*					
Banks/Savings & Loans/Commercial	*		*	*				
Stock Brokers		*	*	*				*
Retail Grocers		*	*					
Food Services	*	*	*		*			
Hotels/Restaurants/Night Clubs			*		*			
Insurance/Property Management	*	*	*	*				
Petroleum Services								*
Real Estate/Land Development		*	*					*
Race Track/Amusements		*	*					*
Trucking/Moving/Delivery Services			*	*				
Department Stores/Retail Businesses			*		*			
HEALTH								
Medical/Hospital			*					
Mortuary Services	*				*			
HOME ECONOMICS								
Maid/Cleaning Services			*	*				

Table 14. Response to Recruitment Sources by Occupational Category
WHAT RECRUITMENT SOURCES DO YOU USE TO FILL POSITIONS?

	Private Employment Agencies	Florida State Employment Service	Newspaper Ads	Employee Referrals	College; H.S. or Technical School Placement Office	Professional Publications	Other Public Agencies	Other
OFFICE								
Accounting/Computer/Communications			*		*			
Employment Services			*	*				*
Law Firms			*					*
TRADE AND INDUSTRIAL								
Electrical/A/C Repairs			*					
Airlines			*					*
Construction			*					
Architectural Occupations			*			*		
Pool Maintenance	*	*	*					
Laundries/Dry Cleaning Services	*		*	*		*		*
Printers/Newspapers/Photographers			*					
Ship Builders			*					
Manufacturing/Machine Shops		*	*					
Energy Sources/Utilities		*	*		*			
Radio Stations		*						*
PUBLIC SERVICE								
Security			*					
Schools/Universities			*					
CITY GOVERNMENT		*	*	*				*

Table 15. Response to Orientation of New Personnel

QUESTIONNAIRE ITEM	RESPONSE					
Who currently orients your new personnel before they begin the job?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Personnel Manager	99	24.7	301	75.2	0	0.0
Training Director	42	10.5	358	89.5	0	0.0
Department Head or Supervisor	266	66.5	134	33.5	0	0.0
Co-Workers	22	5.5	378	94.5	0	0.0
Other	75	18.8	325	81.3	0	0.0

Table 16. Response to Orientation of New Personnel by Occupational Category
WHO CURRENTLY ORIENTS YOUR NEW PERSONNEL BEFORE THEY BEGIN THE JOB?

	Personnel Manager	Training Director	Department Head or Supervisor	Co-workers	Other
AGRICULTURE					
Nurseries/Florists/Landscapers			*		
Taxidermists				*	
Agriculture Supplies and Services			*		*
Golf Courses/Country Clubs			*		
DISTRIBUTIVE					
Auto Dealerships/Auto Leasing			*		
Banks/Savings & Loans/Commercial				*	
Stock Brokers	*	*			
Retail Grocers			*		
Food Services	*		*		
Hotels/Restaurants/Night Clubs			*		
Insurance/Property Management			*		
Petroleum Services			*		*
Real Estate/Land Development	*		*		
Race Track/Amusements			*		
Trucking/Moving/Delivery Services			*		
Department Stores/Retail Businesses	*				
HEALTH					
Medical/Hospital			*		
Mortuary Services					*
HOME ECONOMICS					
Maid/Cleaning Services			*		*

Table 16. Response to Orientation of New Personnel by Occupational Category

WHO CURRENTLY ORIENTS YOUR NEW PERSONNEL BEFORE THEY BEGIN THE JOB?

	Personnel Manager	Training Director	Department Head or Supervisor	Co-workers	Other
FICE					
counting/Computer/Communications			*		
ployment Services					*
w Firms			*	*	*
ADE AND INDUSTRIAL					
ectrical/A/C Repairs			*		
rlines			*		
nstruction			*		
chitectural Occupations	*				
ol Maintenance	*				
undries/Dry Cleaning Services	*		*		
inters/Newspapers/Photographers			*		
ip Builders			*		
nufacturing/Machine Shops			*		
ergy Sources/Utilities			*		
dio Stations		*	*		
BLIC SERVICE					
curity			*		
hools/Universities			*		
TY GOVERNMENT			*		

Table 17. Response to Current Supplemental Training

QUESTIONNAIRE ITEM	RESPONSE					
	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Do you conduct supplemental training to upgrade employees?	312	78.0	86	21.5	2	0.5

Table 18. Response to Type of Personnel Conducting Supplemental Training

QUESTIONNAIRE ITEM	RESPONSE					
Who currently conducts supplemental training?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Personnel Manager	34	8.5	285	71.2	81	20.2
Training Director	51	12.7	268	66.9	81	20.2
Department Head or Supervisor	174	43.5	145	36.2	81	20.2
Co-Workers	37	9.2	282	70.5	81	20.2
Company School within Broward County	31	7.7	288	72.0	81	20.2
Company School outside Broward County	30	7.5	289	72.2	81	20.2
Outside Agency	35	8.7	284	71.0	81	20.2
Other	81	20.2	238	59.5	81	20.2

Table 19. Response to Type of Personnel Conducting Supplemental Training by Occupational Category
WHO CURRENTLY CONDUCTS SUPPLEMENTAL TRAINING?

	Personnel Manager	Training Director	Department Head or Supervisor	Co-workers	Company School within Broward County	Company School outside Broward County	Outside Agency	Other
AGRICULTURE								
Nurseries/Florists/Landscapers			*				*	
Taxidermists								
Agriculture Supplies and Services					*		*	*
Golf Courses/Country Clubs			*					
DISTRIBUTIVE								
Auto Dealerships/Auto Leasing						*		
Banks/Savings & Loans/Commercial			*					
Stock Brokers	*		*	*				
Retail Grocers			*					
Food Services	*		*					
Hotels/Restaurants/Night Clubs			*					
Insurance/Property Management								
Petroleum Services								*
Real Estate/Land Development			*					
Race Track/Amusements				*				
Trucking/Moving/Delivery Services			*			*		
Department Stores/Retail Businesses								
HEALTH								
Medical/Hospital			*					
Mortuary Services					*	*		
HOME ECONOMICS								
Maid/Cleaning Services			*					

Table 19. Response to Type of Personnel Conducting Supplemental Training by Occupational Category
WHO CURRENTLY CONDUCTS SUPPLEMENTAL TRAINING?

	Personnel Manager	Training Director	Department Head or Supervisor	Co-workers	Company School within Broward County	Company School outside Broward County	Outside Agency	Other
OFFICE								
Accounting/Computer/Communications			*					
Employment Services								*
Law Firms								*
TRADE AND INDUSTRIAL								
Electrical/A/C Repairs			*					
Airlines			*		*		*	*
Construction			*					
Architectural Occupations								
Pool Maintenance	*							
Laundries/Dry Cleaning Services	*		*					*
Printers/Newspapers/Photographers			*					
Ship Builders								*
Manufacturing/Machine Shops			*					
Energy Sources/Utilities		*	*			*		
Radio Stations							*	
PUBLIC SERVICE								
Security								
Schools/Universities								
CITY GOVERNMENT								

Table 20. Response to Unmet Training Needs

QUESTIONNAIRE ITEM	RESPONSE					
	YES		NO		NO RESPONSE	
Do you have any specific training needs That are not being met?	Frequency	%	Frequency	%	Frequency	%
	149	37.2	248	62.0	3	0.7

Table 21. Response to High Employee Turnover

QUESTIONNAIRE ITEM	RESPONSE					
	YES		NO		NO RESPONSE	
Do you have any position(s) with a high turnover of employees?	Frequency	%	Frequency	%	Frequency	%
	285	71.2	114	28.5	1	0.2

Positions with High Turnover and Reasons

Position	Reason
Restaurant	Transient, seasonal, poor attitudes
Sales	Transient, lack of loyalty
Secretarial	Transient, poor pay
Nursing	Poor pay, lack of loyalty
Bank Telling	Transient, poor pay

Table 22. Response to Employee Promotion

QUESTIONNAIRE ITEM	RESPONSE					
How do employees advance within the company?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Seniority	49	12.2	350	87.5	1	0.2
Additional on the job training	100	25.0	299	74.7	1	0.2
Further outside schooling	43	10.7	356	89.0	1	0.2
Promotion on merit	219	54.7	180	45.0	1	0.2
Performance Evaluation	256	64.0	143	35.7	1	0.2
Testing	9	2.2	390	97.5	1	0.2
Other	45	11.2	354	88.4	1	0.2

Table 23. Response to Employee Promotion by Occupational Category HOW DO EMPLOYEES ADVANCE WITHIN THE COMPANY?

	Seniority	Additional on the Job Training	Further Outside Schooling	Promotion on Merit	Performance Evaluation	Testing	Other
AGRICULTURE							
Nurseries/Florists/Landscapers				*	*		
Taxidermists		*		*			
Agriculture Supplies and Services		*		*	*		
Golf Courses/Country Clubs					*		
DISTRIBUTIVE							
Auto Dealerships/Auto Leasing				*	*		
Banks/Savings & Loans/Commercial				*	*		
Stock Brokers	*			*	*		*
Retail Grocers				*	*		
Food Services					*		
Hotels/Restaurants/Night Clubs				*	*		
Insurance/Property Management				*	*		
Petroleum Services		*		*	*		
Real Estate/Land Development				*	*		
Race Track/Amusements					*		
Trucking/Moving/Delivery Services					*		
Department Stores/Retail Businesses				*	*		
HEALTH							
Medical/Hospital							
Mortuary Services			*	*			
HOME ECONOMICS							
Maid/Cleaning Services				*	*		

Table 23. Response to Employee Promotion by Occupational Category
HOW DO EMPLOYEES ADVANCE WITHIN THE COMPANY?

	Seniority	Additional on the job Training	Further Outside Schooling	Promotion on Merit	Performance Evaluation	Testing	Other
OFFICE							
Accounting/Computer/Communications				*	*		
Employment Services							*
Law Firms				*	*		
TRADE AND INDUSTRIAL							
Electrical/A/C Repairs					*		
Airlines					*		
Construction				*	*		
Architectural Occupations					*		
Pool Maintenance					*		
Laundries/Dry Cleaning Services			*	*	*		
Printers/Newspapers/Photographers				*	*		
Ship Builders				*	*		
Manufacturing/Machine Shops				*	*		
Energy Sources/Utilities	*	*		*	*		
Radio Stations		*			*		
PUBLIC SERVICE							
Security				*			
Schools/Universities			*	*			*
CITY GOVERNMENT				*	*		

Questions #20 & 21 ask each employer interviewed whether or not they are interested in having new programs developed for their specific needs. Fifty-six percent of the companies are interested in new program development (Table 25). Table 26 shows by frequency and percentage distribution, where employers prefer to locate the training sites, and Table 27 shows these preferences by occupational category. "Other" responses are shown in Table 4.

Question #22 asks what incentives the employers currently offer to their employees for taking further schooling or training. Table 28 shows by frequency and percentage distribution that 50.0% provide company payment. Table 30 shows incentives offered within each occupational category.

Questions #23 & 24 show that 41.2% of those who would like new training programs, are willing to offer their employees incentives for taking the new training (Table 29). Tables 31 and 32 show by frequency and percentage distribution, and by occupational category, that company payment and possible subsequent promotion would be the most frequent types of incentives provided.

Question 25, (Table 33) shows that 64.2% of the employers in the survey have hired handicapped persons. Many of the employers volunteered information on the nature of the handicaps. These handicaps are listed in Table 33. Table 11 shows which occupational categories have hired the handicapped.

Question #26 shows that 37.7% of the companies would be willing to participate in special training programs for the handicapped, but with reservations based upon the nature of the handicap (Table 34). Table 11 lists occupational categories willing to participate.

Question #27 shows that 51.7% of all survey respondents have an Affirmative Action Plan (Table 35). Table 11 shows which occupational categories have such a plan.

Table 36 is a summation of county-wide results to each questionnaire item.

The next set of tables appear in Appendix K and are titled Projected Job Demand, Educational and Experience Requirements by Occupational Category Based Upon 2-Year Projections. These tables show the job titles and positions within each occupational category in which the employers predicted the largest growth within 2 years. Employers also indicated the minimum education level and experience requirements for each job title. The column headed "Minimum Education Required" contains information which shows the range of education which each company may require. This information may represent a range in education from no minimum through graduate work or professional degree. The final column, "Experience Required" indicates whether or not the majority of employers in that category require previous experience.

Table 24. Response to Filling of Management Positions

QUESTIONNAIRE ITEM	RESPONSE					
If you have a management level position open do you try to fill it	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
From within	363	90.7	34	8.5	3	0.7

Table 25. Response to Interest in New Training Programs

QUESTIONNAIRE ITEM	RESPONSE					
Would you be interested in having any of the educational agencies in Broward County such as, universities, community colleges, technical schools or public schools, establish training programs to meet your needs?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
	224	56.0	167	41.7	9	2.2

Table 26. Response to Training Site Preference

QUESTIONNAIRE ITEM	RESPONSE	
Where would you prefer that this training take place?	Frequency	%
On Site	79	19.7
At one of the Colleges or Schools	120	30.0
Other	20	0.5
No Response	181	45.2

Table 27. Response to Training Site Preference by Occupational Category
WHERE WOULD YOU PREFER THAT THIS TRAINING TAKE PLACE?

	On Site	At one of the Colleges or Schools	Other	No Response
AGRICULTURE				
Nurseries/Florists/Landscapers				*
Taxidermists				*
Agriculture Supplies and Services				*
Golf Courses/Country Clubs				*
DISTRIBUTIVE				
Auto Dealerships/Auto Leasing				*
Banks/Savings & Loans/Commercial				*
Stock Brokers				*
Retail Grocers				
Food Services		*		
Hotels/Restaurants/Night Clubs				*
Insurance/Property Management		*		
Petroleum Services				*
Real Estate/Land Development				*
Race Track/Amusements	*			
Trucking/Moving/Delivery Services				*
Department Stores/Retail Businesses				*
HEALTH				
Medical/Hospital	*			
Mortuary Services				*
HOME ECONOMICS				
Maid/Cleaning Services				*

Table 27. Response to Training Site Preference by Occupational Category
WHERE WOULD YOU PREFER THAT THIS TRAINING TAKE PLACE?

	On Site	At one of the Colleges or Schools	Other	No Response
OFFICE				
Accounting/Computer/Communications		*		
Employment Services		*		
Law Firms		*		
TRADE AND INDUSTRIAL				
Electrical/A/C Repairs	*			
Airlines	*			
Construction				*
Architectural Occupations				*
Pool Maintenance	*			
Laundries/Dry Cleaning Services	*			
Printers/Newspapers/Photographers		*		
Ship Builders				*
Manufacturing/Machine Shops				*
Energy Sources/Utilities	*			
Radio Stations				*
PUBLIC SERVICE				
Security				*
Schools/Universities				*
CITY GOVERNMENT				*

Table 28. Response to Current Incentives for Training

QUESTIONNAIRE ITEM	RESPONSE					
What incentives do you currently offer for employees taking further training?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Release time from work	29	7.2	367	91.7	4	1.0
Company payment	200	50.0	196	49.0	4	1.0
Possible subsequent promotion	134	33.5	262	65.5	4	1.0
None	117	29.2	279	69.7	4	1.0
Other	29	7.2	366	91.5	5	1.2

Table 29. Response to Current Incentives for Training by Occupational Category

QUESTIONNAIRE ITEM	RESPONSE					
Would you be willing to offer incentives for new training programs developed by the educational agencies in Broward County?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
	165	41.2	72	18.0	163	40.7

Table 30. Response to Current Incentives for Training by Occupational Category
WHAT INCENTIVES DO YOU CURRENTLY OFFER FOR EMPLOYEES TAKING FURTHER TRAINING?

	Release Time from Work	Company Payment	Possible Subsequent Promotion	None	Other
AGRICULTURE					
Nurseries/Florists/Landscapers		*		*	
Taxidermists			*		
Agriculture Supplies and Services	*	*	*		*
Golf Courses/Country Clubs				*	
DISTRIBUTIVE					
Auto Dealerships/Auto Leasing		*			
Banks/Savings & Loans/Commercial		*			
Stock Brokers		*	*		
Retail Grocers				*	
Food Services				*	
Hotels/Restaurants/Night Clubs					
Insurance/Property Management		*			
Petroleum Services		*	*		
Real Estate/Land Development		*		*	
Race Track/Amusements				*	
Trucking/Moving/Delivery Services		*			
Department Stores/Retail Businesses					
HEALTH					
Medical/Hospital		*			
Mortuary Services				*	
HOME ECONOMICS					
Maid/Cleaning Services		*		*	

Table 30. Response to Current Incentives for Training by Occupational Category
WHAT INCENTIVES DO YOU CURRENTLY OFFER FOR EMPLOYEES TAKING FURTHER TRAINING?

	Release Time from Work	Company Payment	Possible Subsequent Promotion	None	Other
OFFICE					
Accounting/Computer/Communications		*	*		
Employment Services			*		
Law Firms					
TRADE AND INDUSTRIAL					
Electrical/A/C Repairs				*	
Airlines		*			
Construction					
Architectural Occupations					*
Pool Maintenance					*
Laundries/Dry Cleaning Services		*	*		
Printers/Newspapers/Photographers			*		
Ship Builders			*	*	
Manufacturing/Machine Shops		*			
Energy Sources/Utilities		*	*		
Radio Stations				*	
PUBLIC SERVICE					
Security				*	
Schools/Universities					
CITY GOVERNMENT		*			

Table 31. Response to Types of Incentives for New Training Programs

QUESTIONNAIRE ITEM	RESPONSE					
What types of incentives would you offer?	YES		NO		NO RESPONSE	
	Frequency	%	Frequency	%	Frequency	%
Release time from work	21	5.2	162	40.5	217	54.2
Company payment	118	29.5	65	16.2	217	54.2
Possible subsequent promotion	72	18.0	111	27.7	217	54.2
None	15	3.7	168	42.0	217	54.2
Other	33	8.2	151	37.7	216	54.0

Table 32. Response to Types of Incentives for New Training Programs by Occupational Category

WHAT TYPES OF INCENTIVES WOULD YOU OFFER?

	Release Time from Work	Company Payment	Possible Subsequent Promotion	None	Other
AGRICULTURE					
Nurseries/Florists/Landscapers					
Taxidermists					
Agriculture Supplies and Services	*	*			*
Golf Courses/Country Clubs					
DISTRIBUTIVE					
Auto Dealerships/Auto Leasing					
Banks/Savings & Loans/Commercial					
Stock Brokers			*		
Retail Grocers					
Food Services				*	
Hotels/Restaurants/Night Clubs					
Insurance/Property Management					
Petroleum Services					
Real Estate/Land Development					
Race Track/Amusements					*
Trucking/Moving/Delivery Services					
Department Stores/Retail Businesses					
HEALTH					
Medical/Hospital		*			
Mortuary Services					
HOME ECONOMICS					
Maid/Cleaning Services			*		

Table 32. Response to Types of Incentives for New Training Programs by Occupational Category
WHAT TYPES OF INCENTIVES WOULD YOU OFFER?

	Release Time from Work	Company Payment	Possible Subsequent Promotion	None	Other
OFFICE					
Accounting/Computer/Communications		*			
Employment Services			*		
Law Firms		*	*		
TRADE AND INDUSTRIAL					
Electrical/A/C Repairs					
Airlines	*	*	*		
Construction					
Architectural Occupations					
Pool Maintenance					*
Laundries/Dry Cleaning Services		*	*		
Printers/Newspapers/Photographers					
Ship Builders					
Manufacturing/Machine Shops					
Energy Sources/Utilities		*	*		
Radio Stations					
PUBLIC SERVICE					
Security					
Schools/Universities					
CITY GOVERNMENT					

Table 33. Response to Hiring the Handicapped

QUESTIONNAIRE ITEM	RESPONSE					
	YES		NO		NO RESPONSE	
Have you ever hired any handicapped persons?	Frequency	%	Frequency	%	Frequenyc	%
	257	64.2	137	34.2	6	1.4
Persons have been hired with the following handicaps:						
Physical handicaps Deafness Missing Limbs Blindness Mental Handicaps Epileptic						

Table 34. Response to Willingness to Train the Handicapped

QUESTIONNAIRE ITEM	RESPONSE	
Would you be willing to participate in special training programs to train handicapped persons for jobs in your company?	Frequency	%
Definitely would you participate	98	24.5
Might participate but with reservations	151	37.7
Undecided	73	18.2
Would you prefer not to participate	54	13.5
Definitely do not want to participate	6	1.5
No response	18	4.5

Table 35. Response to Affirmative Action Plan

QUESTIONNAIRE ITEM	RESPONSE					
	YES		NO		NO RESPONSE	
Does your company have an Affirmative Action Plan?	Frequency	%	Frequency	%	Frequency	%
	207	51.7	184	46.0	9	0.2

Table 36. County Wide Results to Questionnaire Items

BUSINESS/INDUSTRY/GOVERNMENT FACT SHEET

Questionnaire Items	County-Wide Results
Person Interviewed	Manager
Most important quality looked for in Employee candidates	Dependability
Are present employees adequately prepared for needs in :	
Basic Skills	Yes
Technical Skills	Yes
Management Skills	Yes
Work Attitude	Yes
Sense of Personal Responsibility	Yes
Ability to get along with co-workers	Yes
New products or services within next 5 years requiring new personnel	Yes
Anticipated cutbacks within 5 years	No
Positions that were difficult to fill	Yes
Recruitment sources used to fill positions	Newspapers
Person who orients new personnel	Dept. Head
Supplemental training to upgrade employees	Yes
Person conducting supplemental training	Dept. Head
Specific training needs not being met	No
Have positions with high turnover of employees	Yes
How employees advance within the company	Evaluation
Fill management level positions from within	Yes
Interested in new training programs	Yes

Table 36.

Prefer training to take place ----------------------On-Site

Incentives currently offered employees for further training ------------------Tuition payment

Willingness to offer incentives for new training programs -------------------------Yes

Have hired handicapped ----------------------------Yes

Willingness to participate in special training programs for handicapped-----------------------------------Yes

Affirmative Action participant --------------------Yes

Appendix L contains information regarding positions within each occupational category. The positions listed are those which, according to area employers, will have the highest percentage of growth over the next five years. The numbers listed under each occupational category represent the Florida Community College (ICS) codes and United States Office of Education codes for each type of occupation. Appendix E contains complete listings of all job titles employed in the respective occupational categories and the corresponding C.C. and U.S.O E. codes. Any job title not having these code numbers were added in by the employers.

Another objective of the study was to map the assessed training needs with educational agencies in Broward County already offering programs. Appendix J shows all the public and private schools in the county and the institutions of higher education in the surrounding area with indications (X) concerning the programs currently being offered.

The third objective was to determine which of the educational institutions in the area could offer the needed training programs. Results of the study along with recommendations of the Broward Industrial Board and the Fort Lauderdale Area Chamber of Commerce for disseminating results appear in Chapter IV.

An analysis of variance (0.05 level of significance) and multiple regression analysis were run on the data by occupational category. Results indicated that there is no significant difference among occupational categories with regard to training needs.

IV. Conclusions, Recommendations, and Implications

Many conclusions become evident from the survey results enumerated in the preceding chapter. The conclusions are listed below in order of the project research questions:

1. Existing training needs of major Broward County Employers (business, industry, and government) were determined as described in the Results and Appendices and lead to the conclusions that most Broward County employers:

- Indicate "dependability" and "honesty" as the most important qualities among job candidates;
- Agree that employees have the ability to get along with co-workers and have adequate technical skills;
- Anticipate new products or services within the next five years that will demand new jobs;
- Do not anticipate any cut backs in products or services that will modify or eliminate positions in the next five years;
- Have experienced difficulty in filling some positions;
- Use newspapers as the major recruitment source;
- Utilize depar[illegible]nt heads/supervisors to orient new personnel before they [illegible]n the job;
- Have department heads/supervisors conduct supplemental training to upgrade personnel;
- Advance employees within the companies by performance evaluation;
- Fill management-level positions from within;
- Are interested in having educational agencies in Broward County establish training programs to meet their needs;
- Indicate preference for training class locations on-site;
- Offer company payment for tuition to employees for participation in supplemental training;
- Are willing to offer incentives such as: payment of tuition for completing training programs developed by the educational agencies in Broward County;
- Have hired handicapped persons and are willing to participate (with some reservations) in special training programs for the handicapped; and
- Half of them have an Affirmative Action Plan.

Many positions which are hard to fill and which have high turnover of employees are that way primarily because of low pay scales and poor working hours. Most of the positions do not require any specific technical skills for entry-level and result in the hiring of transient workers who often exhibit poor work attitudes and "lack of loyalty". Therefore, in many cases, the employment problems are not due to poor training by educational agencies but, rather, are caused by factors, such as low pay and poor working hours, in the field.

The following types of training were identified by employers as most needed in Broward County:

Type of Training:	Personal, Behavioral	Skill or Technical	Management
Positions Requiring Training:	Nurses Secretaries Home Health Aides	Waitresses Machinists Nurses Secretaries Electronic-Technicians Tool & Die Makers Computer Personnel	Management Nurses Sales Home Health Aides

Minimum education required varies tremendously even within single occupational job categories, and most positions require experience. Based upon two-year projections, the highest projected demand occupations included the following:

- Sales
- Assemblers/Production
- Managers
- Waiters/Waitresses
- Registered Nurses
- Nurses Aides
- Housekeeping Personnel
- Secretaries
- Bookkeepers
- Cooks & Chefs

Changes in products and services were attributed as bringing need for changes in the training of the following types of personnel:

- Computer/Keypunch Personnel
- Engineers
- Sales Personnel
- Nurses/Nurses Aides
- Secretaries
- Mechanics
- Electronic Technicians
- Machinists
- Assemblers

2. Determination of which educational agencies in Broward County could best fulfill the training needs: the training needs are too numerous for one institution to fulfill. However, it appears that employers are very willing to assist the educational agencies with the development of the necessary training programs. Coordination among the vocational centers, public School Board, and colleges will also enhance the planning efforts for implementation strategies. Implementation must be the focus, since employers are becoming disenchanted with continual surveys and no follow-up.

3. Companies were informed of the results by means of a packet including a letter from the Project Director and Coordinator thanking them for their contributions, a copy of the "Training Needs Assessment" brochure, and a Fact Sheet listing county-wide results compared to those of their occupational category type. Direct feedback to respondents is the best method for fostering continued liaison between the college and the private sector. It enhances cooperation and builds confidence between the public and private sectors as well as furthering the College goal of meeting the needs of its constituencies.

Recommendations and Implications

The following steps are recommended:

1. Broward Community College personnel inform educational agencies of the Training Needs Assessment results.
    a. Presentation of results should be made to the Broward County Vocational-Technical Coordinating Council;
    b. Results should be sent to the Division of Community Colleges and the Division of Vocational Education of the State of Florida Department of Education, and to the regional state office;
    c. Other community colleges and neighboring universities should be informed; and
    d. Presentation of results be made to BCC's Board of Trustees.
2. The BETA project, "Program Development for New Occupational Training," be endorsed by the BCC Board of Trustees and implemented.
    a. The project was proposed and submitted to BETA for October 1, 1978, through September 30, 1979, funding; and
    b. The project was approved by BETA Council and contains the following objectives:
        (1) To form an advisory board among business, industry, local units of government and educational institutions in order to establish a system for identification and prioritization of Broward County employer training needs and the systematic updating of those needs;

(2) To select the highest need priorities for each area (discipline and sector) and initiate course/program development;

  (a) Conduct task analysis for all job titles as necessary;

  (b) Determine job-entry level competencies;

  (c) Translate competencies into curricula;

(3) To conduct all necessary research for documentation of resources available for the delivery of new courses/programs; and

(4) To implement the new training programs.

3. Dialogue be maintained between the College and the employers in order to implement new training programs.

Observations

Numerous observations were made by project workers which were indirect extensions of the responses received to questionniare items. Recruitment observations are listed below:

1. Employers emphasize the importance of the "basics." In general, employee candidates well-trained in basic skills are much easier to train.
2. Employers differentiate between employees "over twenty-five" and those "under twenty-five" with regard to adequacy of basic skills and attitude toward work. Persons under twenty-five years of age including college graduates, are viewed as having poor basic skills and poor attitudes toward work. Some employers suggested that a course in work attitude should be taught in high school.
3. Much of the high turnover in employees is a result of the transient nature of the Southeast Florida population.
4. Many employers expressed the need for more communication regarding training programs offered by educational institutions in the county.
5. Employers believe that high school counselors have a tendency to advise students away from technical programs and into more traditional liberal arts disciplines.
6. The Florida State Employment Service does not seem to screen employee candidates adequately.
7. Most recruitment for skilled workers is conducted in the North. Many companies do not even advertise in the South Florida area for job openings.
8. Many employers do not appear to know what is meant by an "Affirmative Action Plan" even though such a plan is required by law in companies with fifty or more employees.
9. Many employers who had hired handicapped persons stated that they turned out to be some of their most valued employees.

APPENDICES

Appendix A

Sector Sampling By Zipcodes

North Sector Zipcodes

33060
33062
33063
33064
33065
33066
33067
33068
33306
33308
33309
33319
33321
33334
33441

Central Sector Zipcodes

33301
33304
33305
33311
33312
33313
33314
33315
33316
33317
33322
33324
33325
33326
33328
33330
33331

South Sector Zipcodes

33004
33009
33020
33023
33024
33025
33026

Appendix B

broward community college

administrative offices
225 east las olas boulevard
fort lauderdale, florida 33301

November 17, 1977

Dear Broward County Employer:

Broward Community College, as part of the effort in planning for responsiveness to community and learner needs, is conducting a county-wide training needs assessment in cooperation with the Fort Lauderdale Area Chamber of Commerce, Broward Industrial Board, and Broward Employment and Training Administration. The goal of the needs assessment is to aid the community in identifying training needs for upgrading personnel and to identify the institutions in the area which can best provide this training. The results of this effort will be carefully evaluated by the College Office of Institutional Research and Systems Planning and findings will be disseminated to all participants.

We urge your participation in this endeavor to assist us in helping meet the training needs of our major employers Personal interviews will be conducted by a Broward Community College representative and should take no more than half an hour. This individual will be contacting you soon to establish an appointment.

We look forward to your cooperation.

Sincerely,

Charles V Emerson

Mr. Richard G. Clark
Executive Director
Broward Industrial Board

Mr. Charles V. Emerson
Executive Vice President
Fort Lauderdale Area
Chamber of Commerce

broward community college

administrative offices
225 east las olas boulevard
fort lauderdale, florida 33301

December 5, 1977

Dear Broward County Employer:

Recently you received a joint letter from the Broward Industrial Board and the Fort Lauderdale Area Chamber of Commerce requesting your cooperation in our Training Needs Assessment Project. The purpose of the project is to assess the training needs of Broward County's major employers and to determine which educational agencies could assist by developing training to meet the needs. This is the first cooperative attempt in Broward County by business, industry, and education to assess needs and develop training for new employees, and/or to supplement, upgrade or retain present employees. The project is funded and supported by the Broward Employment Training Administration.

I fervently hope that you will take part in this effort with us. We are asking that you agree to being interviewed for approximately half an hour in your office by a Broward Community College interviewer. Your responses will not be publicly divulged. Your specific needs will be assessed; you will receive a comparative analysis of your needs and the average needs of companies similar to yours; and you will be placed in contact with educational agencies in the area which are best equipped to meet your needs. Even if you are pleased with your current training program, you should find the comparative analysis informative.

Kathleen Mann will be contacting you by phone for an interview sometime during the period of December through February. Analysis of results will take place in March and will be reported back to you during the period from April through June.

To assist us in assessing your current and future training needs, we would like for you to have completed the form attached to this letter which indicates the current numbers and types of employees you hire and your projections for one, two, and five years from now. The list was validated by business persons similar to yourself in your field. Your particular company may have some positions not listed or may not have all those listed. If this is the case, please write in your additional ones and leave blank those you do not have. The interviewer will pick the form up when she comes to interview you.

Again, the Broward Employment Training Administration, Broward Industrial Board, and Fort Lauderdale Area Chamber of Commerce have joined us, Broward Community College, in asking your cooperation and participation in the Training Needs Assessment. We hope that you will agree to the interview which will help make this project a success. If you have any questions regarding the project, please do not hesitate to call me at (467-6700, Ext. 232). I am looking forward to your participation!

Sincerely,

Mantha Vlahos

Dr. Mantha Vlahos
Director of Institutional Research
and Systems Planning

MV:ew
Attach.

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
21.0000	Nurseries/Florists/Landscapers	010000
21.0101	Taxidermists	010101
21.0200	Agriculture Supplies & Services	160200
21.0300	Golf Courses/Country Clubs	010300
22.0300	Auto Dealerships/Auto Leasing	040300
22.0400	Banks/Savings & Loans/Commercial	040400
22.0450	Stock Brokers	040406
22.0600	Retail Grocers/Wholesalers	040600
22.0700	Food Services	040700
22.1100	Hotels/Restaurants/Nightclubs	041100
22.1300	Insurance Companies/Property Management	041300
22.1600	Petroleum Services	041600
22.1700	Real Estate/Land Development	041700
22.1800	Amusements/Race Tracks	041800
22.1900	Trucking/Moving/Delivery Services	041900
22.2000	Department Stores/Retail Businesses	042201
23.0000	Hospitals/Medical Services	070000
23.0909	Mortuary Services	160519
24.0205	Maid/Cleaning Services	090699
25.0100	Accounting/Computer/Communications	140100
25.0600	Employment Services	140600
25.0707	Law Firms	160516
26.0101	Electrical/Air Conditioning Repairs	170102
26.0400	Airlines Occupations	170504

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
26.0100	Construction Occupations	170900
26.1011	Architectural Occupations	160103
26.1106	Pool Maintenance Services	171006
26.1600	Laundries/Dry Cleaning Services	172500
26.1900	Printers/Newspapers/Photographers	170800
26.2202	Ship Builders	171805
26.2300	Manufacturing/Machine Shops	171900
26.3201	Energy Sources/Utilities	171503
26.9907	Radio Stations	160600
27.0202	Security	172205
27.0300	Schools/Universities	090207
27.0800	City Government	173200

Appendix E

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
21.0000	**Nurseries/Florists/Landscapers**	010000
25.0805	Managers	140802
26.1702	Agricultural Foremen	173103
21.0305	Agricultural Mechanics	010301
22.0501	Floral Designers	090506
26.1703	Grounds Superintendents	173104
21.0304	Irrigation Specialists	010305
26.1014	Laborers	170914
21.0504	Landscape Architects	010504
21.0306	Landscape Maintenance	010304
22.1901	Local Truck Drivers	041901
21.0301	Power Truck Operators	010301
22.1901	Sales Representatives	042204
25.0702	Secretaries	140702
25.0503	Shipping and Receiving Clerks	140306
21.0309	Small Machine Operators	010399
21.0603	Soil Conservationists	010601
25.0504	Stock Clerks	140307
22.0501	Floral Consultants	040501
21.0101	**Taxidermists**	010101
25.0702	Secretaries	140702
25.0102	Bookkeepers	140102
25.0805	Office Managers	140801
25.0805	Managers	140802
	Marine Taxidermists	
22.1901	Truck Drivers	041901
21.0200	**Agriculture Supplies/Services (Pest Control Technology)**	160200
25.0805	Office Managers	140802
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
22.2102	Telephone Solicitors	142205
22.2101	Sales Managers	042203
21.0213	Route Supervisors	160213
22.2103	Salesmen (Monthly service)	042204
21.0212	Termite Supervisors	160212
21.0214	Termite Control Salesmen	160214
21.0211	Tent Crew	160211
21.0207	Subterranean Termite Technicians	160207
21.0210	Fumigators	160210
21.0215	Lawn Control Salesmen	160215
21.0206	Lawn Technicians	160206
21.0205	Pest Control Technicians	160205

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
21.0300	Golf Courses/Country Clubs	010300
25.0805	Managers	140802
21.0507	Greens Superintendents	010507
21.0506	Turf Management	010506
25.0102	Bookkeepers	140102
25.0104	Office Machine Operators	140103
25.0702	Secretaries	140702
26.2907	Hostesses	173308
26.2904	Waitresses/Waiters	172305
26.2906	Bus Boys	172307
26.2905	Bartenders	172306
26.2901	Bakers	090406
26.2902	Cooks/Chefs	090405
22.1801	Health/Recreation Room Attendents	041804
21.0308	Golf Course Mechanics	010306
21.0504	Landscape Technicians	010504
26.1102	General Building Maintenance	171005
26.1100	Custodial Services	171001
22.0300	Auto Dealerships	040300
25.0805	Office Managers	140801
22.2004	Department Managers	042208
22.0412	Loan Managers	140816
22.2101	Sales Managers	042203
22.1901	Sales People	042204
22.2001	Purchasing Agents	042207
22.0100	Public Relations/Advertising Personnel	040101
25.0102	Bookkeepers	140102
25.0103	Cashiers	140104
25.0201	Computer Operators	140203
25.0104	Office Machine Operators	140103
25.0702	Secretaries	140702
22.0408	Loan Secretaries	140509
22.9901	Telephone Operators	140403
25.0506	Title Clerks	140316
25.0302	File Clerks	140301
25.0902	Typists	140303
26.0309	Automobile Parts Supervisors	040307
26.0302	Automobile Mechanics	170301
26.0308	Service Advisors	170304
25.0504	Stock Clerks	140307
26.0101	Air Conditioning Mechanics	170301
26.0305	Automobile Painters	170402
26.0307	Automobile Parts Sales	040305
26.0306	Automobile Trimmers and Installers	170403
26.1101	Housekeeping Personnel	171001
27.0202	Security Personnel	172205
26.0310	Porters/Get Ready	170404
26.0301	Body Shop Workers	170401
22.1901	Courtesy Driver/Truck	041901

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
22.0300	Auto Leasing	040300
25.0805	Office Managers	140802
22.0100	Public Relations/Advertising Personnel	040101
25.0102	Bookkeepers	140102
25.0201	Computer Operators	140203
25.0104	Office Machine Operators	140103
25.0702	Secretaries	140702
25.0103	Cashiers	140104
22.9901	Telephone Operators	140403
22.1802	Reservationists	041913
22.2001	Purchasing Agents	042207
26.1702	Automobile Parts Supervisors	171303
26.0302	Automobile Mechanics	170301
26.1101	Housekeeping Personnel	171001
22.1901	Drivers	041901
26.0408	Dispatcher	170506
22.0400	Banks - Savings and Loan	040400
25.0805	Managers	140802
22.0413	Mortgage Officers	140514
22.0415	Loan Servicing Officers	140516
22.0414	Operations Officers	140515
25.0600	Personnel Managers	140600
22.0405	Head Tellers	140405
22.0416	Appraisers	140517
25.0107	Auditors	140105
25.0102	Bookkeepers	140102
25.0104	Office Machine Operators	140103
25.0105	Tellers	140502
25.0103	Cashiers	140104
25.0205	E.D.P. Managers	140206
25.0204	Systems Analysts	140201
25.0203	Programmers	140202
25.0806	Comptrollers	140106
25.0201	Computer Operators	140203
25.0306	Key Punch Operators	140313
25.0702	Secretaries	140702
22.0407	Collection Credit Clerks	140501
22.0408	Loan Processing Clerks	140509
22.0409	Loan Servicing Clerks	140510
25.0302	File Clerks	140301
25.0406	Receptionists	140402
25.0405	Couriers	140406
26.1101	Housekeeping Personnel	171001
27.0202	Security	172205
22.0418	Savings Counselors	140519
22.0419	Safe Deposit Clerks	140520
22.0420	In-House Clerks	140521

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
22.0400	Banks - Commercial	040400
25.0807	Managers	140807
22.0413	Mortgage Officers	140514
22.0410	Correspondent Bank Officers	140511
22.0412	Loan Officers	140513
22.0414	Operations Officers	140515
22.0411	Trust Officers	140512
25.0601	Personnel Managers	140601
22.0100	Advertising Personnel/Public Relations	040101
22.0405	Head Tellers	140504
25.0205	Electronic Data Processing Managers	140206
25.0204	Systems Analysts	140201
25.0203	Programmers	140202
25.0806	Comptrollers	140106
25.0206	Tape Librarians	140207
25.0201	Computer Operators	140203
25.0306	Key Punch Operators	140313
25.0305	Proof Machine Operators	140312
25.0904	Teletype Operators	140311
25.0402	Correspondents	140404
25.0105	Tellers	140502
25.0102	Bookkeepers	140102
25.0103	Cashiers	140104
25.0702	Secretaries	140702
25.0903	Dictaphone Typists	140310
25.0902	Typists	140303
22.9901	Switchboard PBX	140403
22.0401	Payroll Clerks	140505
22.0402	Transit Clerks	140503
22.0403	Exchange Clerks	140506
22.0408	Loan Processing Clerks	140509
22.0406	Interest Clerks	140508
22.0404	Mortgage Clerks	140507
25.0302	File Clerks	140301
25.0406	Receptionists	140402
25.0405	Couriers	140406
26.1101	Housekeeping Personnel	171001
	Customer Service Representatives	
	Miscellaneous Officers (Manager)	
	New Accounts Clerks	
22.0450	Stock Brokers	040600
25.0702	Sales Assistant Secretary	140702
25.0102	Bookkeepers	140102
25.0102	Margin Bookkeeper	140102
25.0103	Cashiers	140104
25.0406	Receptionists	140402
	Wire Operator	
25.0301	Duplicating Clerk	140304
25.0805	Managers	140801

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
22.0600	Retail Grocers, Wholesalers	040600
25.0305	Managers	140802
25.0807	Branch Managers	140807
22.0605	Stock Managers	040608
22.0602	Meat Managers	040606
22.0601	Produce Managers	040605
25.0805	Office Managers	140801
25.0702	Secretaries	140702
25.0104	Office Machine Operators	140103
25.0302	File Clerks	140301
22.0100	Public Relations/Advertising Personnel	040101
22.2001	Purchasing Agents	042207
25.0201	Computer Operators	140203
25.0203	Programmers	140202
25.0601	Personnel Workers	140601
26.0706	Commercial Artists	170701
26.1102	General Building Maintenance	171005
26.0302	Mechanics	170301
22.1901	Truck Drivers	041901
22.1904	Warehouse Superintendents	041915
22.1903	Warehousmen	041905
26.1026	Forklift Operators	171109
26.1703	Grounds Superintendents	173104
26.1101	Housekeeping Personnel	171001
26.2903	Meatcutters	172304
22.0606	Meat Wrappers	040610
25.0103	Cashiers	140104
25.0504	Stock Clerks	140307
22.0607	Produce Wrappers	040611
25.0102	Bookkeppers	140102
26.1015	General Production	170915
22.0608	Packing Boys	040612
22.1901	Sales People	042204
25.0503	Shipping and Receiving Clerks	140306
26.2905	Bar Personnel	172306
	Route People	
22.0700	Food Services	040700
25.0805	Managers	140802
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0104	Office Machine Operators	140103
25.0103	Cashiers	140104
22.2001	Purchasing Agents	042207
22.1116	Parking Attendants	041116
26.2905	Bartenders	172306
26.2906	Bus Boys	172307
26.2902	Cooks and Chefs	090405
26.2909	Dishwasher Operators	172310
22.1121	Food Checkers	041121
26.2904	Waiters and Waitresses	172305
27.0202	Security Personnel	172205
26.1102	General/Building Maintenance	171005
26.1101	Housekeeping Personnel	171001
26.2902	Food Preparation Personnel	
26.2902	Food and Equipment Handlers	

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
22.1100	Hotels	041100
22.1101	Hotel Managers and Assistants	041101
22.1104	Convention Manager	041104
22.1108	Reservations Manager	041108
22.1120	Storeroom Managers	041120
22.1105	Banquet Manager	041105
22.1117	Dining Room Manager	041117
26.1603	Laundry Managers	172507
26.2708	Bar Managers	172309
22.1115	Entertainment Director	041115
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0104	Office Machine Operators	140103
22.1102	Hotel Front Office Clerks	041102
25.0307	Accounts Payable Clerks	140319
25.0308	Accounts Receivable Clerks	140320
25.0806	Comptroller	140106
25.0103	Cashiers	140104
25.0107	Auditors	140105
22.9901	Telephone Operators	140403
22.2001	Purchasing Agents	042207
22.1109	Reservations Clerk	041109
22.1901	Sales Representatives	042204
26.1001	Carpenters	170901
26.1007	Plumbers	170910
26.1005	Painters	170909
26.1002	Electricians	171301
26.0101	Air Conditioning Mechanics	170102
26.1102	General Maintenance	171105
21.0504	Landscapers	01 504
21.0508	Yard Maintenance	010508
26.1101	Housekeeping Personnel	171001
22.1111	Housemen	041111
22.1118	House Steward	041118
22.1122	Steward Helpers	041122
22.1113	Porters	041113
22.1110	Maids	041110
22.1103	Bell Captains & Bellmen	041103
22.1106	Pool Attendents	041106
22.1107	Life Guards	041107
22.1116	Parking Attendents	041116
26.1604	Mangle Operators	172508
26.1602	Washer Operators	172503
22.1119	Banquet Steward	041119
26.2906	Bar Boys	172307
26.2905	Bar Tenders	172306
26.2902	Cooks and Chefs	090405
26.2909	Dishwasher Operator	172310
22.1121	Food Checkers	041121
26.2904	Waiters & Waitresses	172305
27.2002	Security Personnel	172205
22.1114	Doormen	041114
22.1112	Valets	041112
26.0304	Gas Attendents	041601

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
22.1100	Restaurants/Nightclubs	041100
25.0805	Managers	140802
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0104	Office Machine Operators	140103
25.0103	Cashiers	140104
22.2001	Purchasing Agents	042207
22.1116	Parking Attendants	041116
26.2905	Bartenders	172306
26.2906	Bus Boys	172307
26.2902	Cooks and Chefs	090405
26.2909	Dishwasher Operators	172310
22.1121	Food Checkers	041121
26.2904	Waiters and Waitresses	172305
27.0202	Security Personnel	172205
26.1102	General/Building Maintenance	171005
26.1101	Housekeeping Personnel	171001
26.2907	Hostesses	172308
22.1901	Sales People	042204
	Entertainers	
26.2902	Grillmen	172302
	Closers	
26.2910	Counter Help	
26.2901	Bakers	172301
25.0504	Stock Room Help	140307
23.1300	Insurance Companies/Property Management	041300
25.0807	Agency Managers	140807
22.2002	Sales Manager/Supervisors	042203
25.0805	Office Managers	140801
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0302	File Clerks	140301
25.0902	Typists	140303
25.0406	Receptionists	140402
22.2102	Telephone Solicitors	042205
22.1306	Agency Trainers	041309
22.1305	Field Trainers	041308
22.1303	Underwriters	041306
22.1307	Group Specialists	041310
22.1308	Pension Specialists	041311
22.1309	Pension Actuaries	041312
22.1301	Claims Adjusters	041304
22.1302	Claims Examiners	041305
22.1304	Insurance Agents or Brokers	041307
26.1101	Housekeeping Personnel	171001
26.1102	General Maintenance	171005
25.0101	Accountants/Comptrollers	140101
	Tour Guides	
22.1901	Sales People	042204

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
22.1600	Petroleum Services	041600
25.0805	Managers	140802
22.1901	Truck Drivers	041901
25.0702	Secretaries	140702
22.1901	Sales People	042204
25.0902	Clerk Typists	140303
26.1702	Supervisors	171303
	Terminal Operators	
26.0304	Station Attendants	041601
22.1903	Warehousemen	041905
25.0803	Office Assistant	140804
26.0302	Mechanics	170301
25.0102	Bookkeeper	140102
25.0101	Accountants	140101
25.0203	Programmer	140202
25.0601	Training Coordinators	140601
22.9901	Switchboard	140403
27.0103	Firemen	172201
26.2203	Tankermen	171806
26.2306	Welders	171909
27.0875	Painters	173275
26.1014	Laborers	170914
	Service Technician	
	Shift Leaders	
22.1700	Real Estate/Land Development	041700
25.0805	Managers	140801
25.0702	Secretaries	140702
25.0102	Bookkeepers	140102
25.0406	Receptionists	140402
25.0101	Accountants	140101
	Attorneys	
26.0404	Pilots	170508
26.1102	Maintenance	171005
25.0405	Messengers	140406
25.0201	Computer Operators	140203
25.0107	Internal Auditors	140105
	Land Planners	
22.1901	Sales Personnel	042204
	Travel Personnel	
25.0601	Personnel Workers	140601
	Accounts Clerks	
	Assistant Chief Land Surveyor	
26.2500	Engineers	160100
	Engineering Technology	
26.1300	Draftsmen	160116
27.1133	Survey Party Chief	173333
26.1013	Survey Instrumentmen	170916
25.0104	Office Machine Operators	140103
	Project Representatives	

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
22.1800	Race Tracks/Amusements	041800
25.0805	General Superintendent	140802
26.1703	Landscape Superintendent	173104
	Barn Area Supervisor	
21.0506	Turf Course Supervisor	010506
	Building Maintenance Superintendent	
	Track Superintendent	
	Cleaning Superintendent	
21.0309	Equipment Operators	010399
26.1101	Cleaning Personnel	171001
26.0302	Mechanics (Auto)	170301
26.1001	Carpenter	170901
26.1007	Plumber	170910
26.1002	Electrician	171301
26.1102	Maintenance Personnel	171005
26.1014	Landscape Laborers	170914
	Barn Area Laborers	
22.1900	Trucking/Moving/Delivery Services	041900
25.0805	Managers	140802
22.1907	Storage Managers	041910
25.0808	Operations Supervisors	140808
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0302	File Clerks	140301
25.0904	Teletype Operators	040311
25.0201	Computer Operators	140203
22.1904	I.C.C. Compliance Officers	041907
22.1909	Dispatchers	041912
25.0507	Inventory Control Clerks	140317
22.1906	Moving Consultants	041909
22.1901	Truck Drivers	041901
22.1301	Claims Adjusters	041304
27.0202	Security	172205
25.0503	Shipping and Receiving Clerks	140306
22.2102	Telephone Solicitors	042205
22.1903	Warehousemen	041905
25.0405	Couriers	140406
26.1014	Truck Driver Helpers	170914
26.0302	Mechanics	170301

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
22.2000	Department Stores, Retail Businesses	042201
22.2002	Retail Business Managers	042203
25.0601	Personnel Managers	140601
22.2004	Department Managers	042208
22.0417	Credit Officials	140518
22.0407	Credit Clerks	140501
25.0805	Office Managers	140801
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0104	Office Machine Operators	140103
25.0201	Computer Operators	140203
25.0203	Programmers	140202
22.2005	Buyers	042209
26.0704	Advertising Artists	170705
26.0702	Window Display	170703
22.0100	Public Relations/Advertising Personnel	040101
22.2003	Retail Sales Clerk	042206
25.0103	Cashiers	140104
25.0503	Shipping and Receiving Clerks	140306
25.0504	Stock Clerks	140307
25.0703	Stenographers	140703
27.0202	Security Personnel	172205
22.1901	Truck Drivers	041901
26.3305	Alterations Personnel	177806
26.3500	Installers/Upholsterers	172700
26.0701	Decorators	170702
26.0302	Warehousemen	170301
	Furniture Finisher	
26.2102	Jewelry/Watch Repairman	171703
26.0302	Mechanics	170301
26.2909	Cooks	090405
26.2909	Dishwashers	172310
26.2910	Cafeteria Workers	
26.0304	Gas Attendants	041601
25.0601	Personnel Workers	140601
26.0201	Appliance Service Technicians	170203
	Auto Laborers	
	Catalogue/Customer Service	
26.1102	General Building Maintenance	171005

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
23.0000	Medical/Hospital	070000
23.9910	Hospital Administrators	070810
25.0805	Office Managers	140801
25.0102	Bookkeepers	140102
25.0201	Computer Operators	140203
25.0203	Programmers	140202
25.0702	Secretaries	140702
25.0104	Office Machine Operators	140103
25.0406	Receptionists	140402
25.0902	Typists	140303
25.0302	File Clerks	140301
25.0103	Cashiers	140104
22.1312	Insurance Clerks	041313
22.9901	Telephone Operators	140403
23.9905	Medical Records Clerks	070705
23.9906	Medical Records Technicians	070704
23.9904	Ward Clerk-Admitting Personnel	070309
25.0601	Personnel Workers	140601
22.0100	Public Relations/Advertising Personnel	040101
22.2001	Purchasing Agents	042207
23.0908	Dieticians	090403
26.2902	Cooks and Chefs	090405
26.1103	Executive Housekeepers	090601
23.9903	Housekeeping Personnel	070819
23.0703	Sanitarians	070812
27.0202	Security Personnel	172205
23.9916	Bio-medical Technicians	070818
23.9914	Cardio-Pulmonary Technologists	070815
23.0901	EEG Technicians	070210
23.0902	EKG Technicians	070209
23.0907	Emergency Medical Technicians	070801
23.9915	Epidemiologists	070816
23.0302	Licensed Practical Nurses	070302
23.0904	Medical Assistants	070805
23.0203	Medical Lab Assistants	160303
23.0200	Medical Lab Technicians	070203
23.0503	Nuclear Medicine Technologists	070208
23.0311	Nurse Clinicians	070311
23.0303	Nurses Aides, Orderlies, Attendents	070303
23.0310	Nursing Administrators	070310
23.0312	Nursing In-Service Educators	070312
23.0401	Occupational Therapists	070401
23.0401	Occupational Therapists Assistants	070402
23.0305	Operating Room Technicians	070304
23.0601	Opthalmic Dispersing Technicians (Opticians)	070601
23.0603	Optometric Assistants	070602
23.9912	Paramedics	070813
23.9911	Pharmacists	070811
23.0402	Physical Therapists	070403
23.0402	Physical Therapists Assistants	070403
23.9908	Physicians	070808
23.9907	Pulmonary Function Technicians	070817
23.0502	Radiologic Therapists	070207

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
23.0000	Medical/Hospital	070000
23.0301	Registered Nurses	070301
23.9909	Speech Pathologists	070809
23.9913	Ultra Sound Technologists	070814
25.2909	Dishwashers/Food Service	1 2310
23.0200	Lab Technologists	070203
	Dietary Utility Aides	
23.0307	Homemakers/home Health Aides	070307
26.1102	Building Maintenance	171005
23.0909	Mortuary Services	160519
	General Personnel	
	Intern Embalmers	
	Intern Funeral Directors	
	Funeral Directors	
	Lead Directors	
25.0702	Secretaries	140702
24.0205	Maid/Cleaning Services	090699
22.1110	Maids	041110
25.0702	Secretaries	140702
25.0803	Drivers-Managers	140804
25.0807	General Managers	140807
22.1901	Sales People	042204

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
25.0100	Accounting/Computer/Communications/Companies	140100
25.0805	Office Managers	140802
25.0101	Accountants	140101
25.0102	Bookkeepers	140102
25.0106	Tax Preparers	140107
25.0204	Systems Analysts	140201
25.0203	Programmers	140202
25.0208	Junior Programmers	140209
25.0207	Program Trainees	140208
25.0206	Tape Librarians	140207
25.0502	Control Clerks	140315
25.0201	Computer Operators	140203
25.0104	Office Machine Operators	140103
25.0702	Secretaries	140702
25.0905	Statistical Clerks	140314
25.0406	Receptionists	140402
22.9901	Telephone Operators	140403
25.0902	Typists	140303
25.0302	File Clerks	140301
25.0403	Postal Clerks	140405
25.0601	Personnel Workers	140601
22.1901	Salespeople	042204
26.1101	Housekeeping Personnel	171001
27.0202	Security Personnel	172205
25.0803	Statistical Supervisor	140804
25.0102	General Bookkeeping Clerks	140102
	Repairman	
	Service Representatives	
	Bill Adjusters	
26.1504	Computer Technician	171402
26.2500	Engineers	160100
25.0201	Console Operators	140203
	Inserting Machine Operators	
	CRT Operators	
25.0101	Junior Accountants	140101
	Key Tape Operators	
22.0417	Credit Analysts	140518
22.0407	Collectors	140501
	Encoding Machine Operators	
25.0600	Employment Services	140600
25.0805	Managers	140802
25.0803	Supervisors	140804
25.0406	Receptionists	140402
22.1901	Sales Representatives	042204
25.0102	Bookkeepers	140102
25.0703	Stenographers	140703
25.0306	Key Punch Operators	140313
25.0902	Typists	140303
25.0901	General Office Clerks	140301

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
25.0707	Law Firms	160516
25.0805	Management	140802
25.0708	Attorneys	160522
27.0863	Legal Secretaries	173263
25.0907	Word Processing Typists	140321
25.0102	Accounting Clerks	140102
25.0102	Bookkeepers	140102
25.0302	Records Clerks (File)	140301
27.0403	Librarians	090264
22.9901	Telephone Operators	140403
25.0405	Couriers	140406
25.0709	Para-legals	160523
25.0406	Receptionists	140402
25.0403	Mail Clerks	140405
26.0101	Electrical/Air Conditioning Repairs	170102
25.0805	Management	140802
26.1002	Electrical Construction Servicemen	171301
26.0101	Air Conditioning In-Shop Installers	
25.0901	Clerical Personnel	140301
26.0400	Airlines	170504
25.0805	Managers	140802
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0302	File Clerks	140301
25.0104	Office Machine Operators	140103
22.0100	Public Relations/Advertising Personnel	040101
25.0601	Personnel Workers	140601
22.1302	Reservationists	041913
22.9901	Telephone Operators	140403
25.0201	Computer Operators	140203
25.0203	Programmers	140202
25.0904	Teletypists	140311
26.0408	Airline Dispatchers	170506
26.0411	Traffic Agents and Clerks	70510
26.0412	Baggage Handlers	170511
26.0415	Freight Agents	170514
26.0404	Pilots	170508
26.0410	Co-Pilots	170509
22.1803	Flight Attendents	041914
26.0406	Flight Engineers	160101
26.0407	Aircraft Mechanics	170503
26.0409	Ground Radio Operators	170507
26.0413	Refuelers	170512
26.0414	Ramp Agents	170513
27.0202	Security Personnel	172205
26.1101	Housekeeping Personnel	171001
22.1901	Sales	042204
25.0101	Accountants	140101
25.0507	Parts Clerks/Inventroy Control	140317

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
26.1000	Construction Occupations	170900
26.1704	Project Managers	173105
26.1705	Field Superintendents	173106
26.1702	Foremen	173103
26.1706	Coordinators	173107
26.1300	Draftsmen	160116
26.1021	Brick Layers	170905
26.1001	Carpenters	170901
26.1004	Cement and Stone Masons	170902
26.1010	Roofers	170912
26.1022	Asbestos and Insulation Workers	170918
26.1008	Dry Wall Installers	170904
26.1006	Plasterers	170903
26.1007	Plumbers/Pipefitters/Welders	170910
26.1002	Electricians	171301
26.1005	Painters/Paper Hangers	170909
26.1018	Floor Covering Installers	170913
26.1019	Terrazzo Workers	170907
26.1020	Tile Setters	170908
26.1009	Glaziers	170911
26.2305	Sheet Metal Workers	171907
26.2310	Structural-Ornamental Ironworkers (Rigger)	171913
26.1014	Construction Laborers	170914
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
27.0202	Security	172205
26.1003	Construction Machinery Operators	171103
22.1901	Drivers	041901
22.1901	Sales Personnel	042204
26.1102	General Maintenance	171005
26.1010	Shingle Layers	170912
	Pre-Cast Installers	
22.0401	Payroll Clerks	140505
26.0408	Dispatchers	170506
22.1903	Warehousemen	041905
	Real Estate Sales	
25.0805	Executive Management	140802
25.0101	Accountants	140101
26.0302	Mechanics	170301
26.2500	Engineers	160100

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
26.1011	Architectural Occupations	160103
26.1300	Architectural Drafters	171201
26.0500	Blue Print Readers	170915
26.1708	Construction Managers	173109
26.1023	Construction Specifications Writers	170920
26.1707	Construction Superintendents	173108
26.1024	Interior Designers	170921
26.1301	Structural Steel Detail Drafters	160132
26.1302	Truss Designers	160133
26.1704	Project Managers	173105
25.0805	Office Managers	140802
25.0102	Bookkeepers	140102
25.0202	Secretaries	140702
26.9902	Technical Writers	160599
26.1303	Mechanical Designers	160134
26.1304	Printed Circuit Board Designers	160135
26.2500	Manufacturing Engineers	160100
26.2307	Tool Makers	171905
26.1305	Machine Designers	160136
	Configuration Analysts	
	Packaging Engineers	
26.1300	Civil Draftsman	160116
26.1907	Technical Illustrators	170809
26.1306	Tetra - Chemical Piping Designers	160137
	Equipment Operators	
	Loss Control Coordinator	
26.1106	Pool Maintenance	171006
25.0702	Secretaries/Receptionists	140702
26.1702	Supervisors	171303
26.1107	Repairmen, Pool	171009
26.1108	Service Technicians, Pool	171008
26.1600	Laundries, Dry Cleaning	172500
25.0805	Plant Managers	140802
25.0805	Managers	140802
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0103	Cashiers/Counter Sales	140104
25.0201	Computer Operators	140203
22.1901	Local Truck Drivers (Delivery)	171104
26.3304	Color Specialists	173505
26.3303	Dyers	172504
26.3305	Seamstresses	177806
23.0703	Soil Room Operators	070812
26.1604	Flatwork Personnel	172508
26.1602	Laundry Production Personnel	172503
26.1604	Linen Products Personnel	172508
	Pressers	
	Spotters	
26.1101	Housekeeping Personnel	171001
26.2500	Engineers	160100

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
26.1900	Printers/Newspapers/Photographers	170800
	Editors	
25.0805	Managers	140801
25.0102	Bookkeepers	140102
25.0302	File Clerks	140301
25.0406	Receptionists	140402
25.0702	Secretaries	140702
25.0905	Statistical Clerks	140314
25.0104	Office Machine Operators	140103
25.0902	Typists	140303
25.0203	Programmers	140202
25.0201	Computer Operators	140203
22.9901	Telephone Operators	140403
22.0100	Public Relations/Advertising Personnel	040101
25.0601	Personnel Workers	140601
22.2001	Purchasing Agents	042207
26.0707	Air Brush Artists	170707
26.0706	Commercial Artists	170701
26.0708	Mechanical Artists	170708
26.1911	Graphic Illustrators	170814
26.1912	Graphic Technicians	170815
26.1901	Composing Room Personnel	170802
26.1903	Lithographic Occupations	170804
26.9902	Technical Writers	160599
26.1902	Printing Pressmen and Assistants	170803
26.1908	Photographers	170808
26.1915	Lab Technicians	170818
26.1904	Photo Engravers	170805
26.1914	Offset Technicians	170817
25.0301	Duplicating Equipment Operators	140304
25.0906	Electrotypers and Stereotypers	140318
26.1906	Book Binders	170807
26.1909	Bindery Specialists/Technicians	170812
26.1916	Newspaper Reporters	170819
26.1913	Press Workers	170816
26.1702	Working Foremen	173103
26.1101	Housekeeping Personnel	171001
22.1901	Sales People	042204
	Editorial Production Workers	
26.1014	Laborers/Paper Handlers	170914
26.1016	Inspectors	173110
	Circulation Personnel	
22.1901	Drivers	041901
26.1102	General Building Maintenance	171005

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
26.2202	Ship Builders	171805
25.0805	Managers	140802
25.0101	Accountants	140101
25.0101	Bookkeepers	140102
25.0702	Secretaries	140702
25.0104	Office Machine Operators	140103
26.1001	Carpenters	170901
26.1002	Electricians	171301
26.1017	Fiberglass Laminators	170917
26.1702	Foremen	173102
26.1016	Inspectors	170916
26.1005	Painters	170909
26.1007	Plumbers	170910
26.1015	Semi-skilled Assemblers	170915
26.1015	Skilled Assemblers	170915
26.2306	Welders	171909
26.0802	Marine Mechanics	171803

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
26.2300	Manufacturing/Machine Shops	171900
25.0805	Managers	140802
25.0101	Accountants	140101
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0406	Receptionists	140402
25.0905	Statistical Clerks	140314
25.0302	File Clerks	140301
25.0902	Typists	140303
25.0104	Office Machine Operators	140103
22.9901	Telephone Operators	140403
25.0201	Computer Operators	140203
25.0203	Programmers	140202
22.3101	Manufacturers Salesworkers	042211
22.0100	Public Relations/Advertising Personnel	040101
22.1201	Marketing Research Workers	041203
22.2001	Purchasing Agents	042207
26.1101	Housekeeping Personnel	171001
26.1102	General Building Maintenance	171005
27.0202	Security Personnel	172205
26.1702	Foremen/Supervisors	171303
26.2500	Engineers	160100
26.1300	Draftsmen	160116
26.1915	Lab Technicians	170818
26.1002	Electricians	171301
26.2408	Electroplaters	171917
26.2307	Tool and Die Makers	171905
26.2309	Pattern Makers	171901
26.2404	Set-Up Men	171916
23.2302	All Around Machinists	171904
26.2303	Machine Tool Operators	171903
26.1015	Assemblers/Production Workers	170915
26.2409	Press Operators	171921
26.2402	Coremakers	171914
26.2406	Millwrights	171918
26.2401	Molders	171913
26.2411	Grinders	171923
26.2410	Trimmers/Finishers	171922
26.2306	Welders and Flame Cutters	171909
26.1016	Inspectors	173110
	Industrial Machine Operators	
25.0507	Control Clerks	140317
25.0504	Stock Clerks	140307
25.0503	Shipping and Receiving Clerks	140306
26.1025	Power Truck Operators	171108
	Installers	
22.1901	Truck Drivers	041901
	Painters, Grinders, Sanders, Fillers	
26.1014	Production/Material Control Laborers	170914

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
26.2300	Manufacturing/Machine Shops	171900
26.1200	Diesel Mechanics	171101
	Photo-Printers	
	N.C. Drill Operators	
	Profile Operators	
	Steel Erectors	
26.0302	Mechanics	170301
	Contracts Administrators	
	Art Work Preparers	
	Real Time Programmers	
	Upholstery Workers	
	Licensed Crewmen	
26.1007	Pipefitters	170910
26.3201	Energy Sources/Utilities	171503
25.0805	Managers	140801
25.0901	Clerks	140301
26.1702	Foreman	171303
22.1901	Sales People	142204
	Delivery Men	
	Installers	
	Servicemen	
26.2306	Welders	171909
26.1014	Laborers	170914
26.0302	Mechanics - Truck	170301
26.9907	Radio Stations	160600
25.0805	Station Managers	140802
25.0805	Office Managers	140801
25.0102	Bookkeepers	140102
25.0702	Secretaries	140702
25.0406	Receptionists/Clerical	140402
22.9901	Telephone Operators	140403
25.0601	Personnel Workers	140601
22.0100	Public Relations/Advertising Personnel	040101
25.0201	Computer Operators	140203
26.9902	Technical Writers	160599
22.9910	Interpreters	160603
22.9908	Broadcast Technicians	160601
22.9911	Radio Announcers	160604
22.9909	Radio Service Technicians	160602

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
27.0202	Security	172205
25.0805	Office Managers	140802
25.0102	Bookkeepers	140102
25.0201	Computer Operators	140203
25.0104	Office Machine Operators	140103
25.0702	Secretaries	140702
27.0202	Security Officers	172205
27.0202	Watchmen	172205
27.0202	Patrolmen	172205
	Investigators/Inspectors	
26.1702	Supervisors	171303
27.0202	Stadium Personnel	172205

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
27.0300	Schools/Universities	090207
27.0301	Accounting Administrative Specialist	090211
25.0102	Accounting Clerk	140102
27.0302	Acquisitions Coordinator	090212
27.0303	Administrative Specialist	090213
27.0304	Admissions and Registration Clerk	090214
27.0305	Admissions and Registration Coordinator	090215
22.2006	Assistant Buyer	047710
25.0702	Assistant Executive Secretary	140702
27.0306	Assistant Supervisor, Custodial Services	090216
27.0307	Audio-Visual Coordinator	090217
27.0308	Audio-Visual Engineer	090218
27.0309	Audio-Visual Technician	090219
27.0310	Bookstore Clerk	090220
27.0311	Bookstore Customer Service Clerk	090221
27.0312	Bookstore Manager	090222
27.0313	Bursar Office Manager	090223
27.0314	Business Clerk	090224
22.2005	Buyer	042209
25.0103	Cashier	140104
27.0315	Class and Space Scheduling Specialist	090225
27.0316	Clerk, Senior	090226
25.0902	Clerk, Typist	140303
25.0201	Computer Operator	140203
26.1101	Custodian	171001
27.0317	Data Control Clerk	090227
25.0104	Duplicating Equipment Operator	140103
26.1504	Electronic Technician	171402
27.0318	Equipment Manager	090228
27.0319	Equipment Operator/Mechanic	090229
25.0302	File Clerk	140301
27.0320	Financial Aid Specialist	090230
21.0508	Gardener	010508
27.0321	Graphics Illustrator	090231
27.0322	Graphics Technician	090232
21.0508	Groundskeeper	010508
27.0323	Instructors	090233
25.0306	Keypunch Operator	140313
27.0324	Keypunch/Registration Clerk	090234
27.0325	Laboratory Supervisor	090235
27.0326	Language Laboratory Clerk	090236
27.0401	Library Administrative Specialist	090262
27.0402	Library Clerk	090263
25.0405	Mail Carrier	140406
25.0403	Mail Clerk	140405
27.0327	Mail Service Coordinator	090237
27.0328	Material Services Supervisor	090238
26.0302	Mechanic	170301
27.0329	Media Specialist	090239
27.0330	Minority Recruiter	090240
27.0331	Office Machine Repair Worker	090241
27.0332	PBX Information Specialist	090242
25.0601	Personnel Specialist	140601

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
27.0300	Schools/Universities	090207
27.0333	Placement Specialist	090243
27.0334	Posting Clerk	090244
27.0355	Press Worker	090245
25.0203	Programmer	140202
27.0336	Property Clerk Specialist	090246
25.0406	Receptionist	140402
27.0337	Records Specialist	090247
27.0338	Science Technician	090248
25.0702	Secretary	140702
27.0339	Security Chief	090249
27.0202	Security Guard	172205
27.0340	Student Advisor	090250
27.0341	Student Activities Specialist	090251
27.0342	Student Affairs Clerk	090252
27.0343	Supervisor, Building Maintenance	090253
27.0344	Supervisor, Custodial Services	090254
27.0345	Supervisor, Grounds Maintenance	090255
27.0346	Textbook Buyer	090256
27.0341	Timekeeper Clerk	090257
27.0348	Transcript Clerk	090258
27.0349	Television Engineer	090259
27.0350	Vehicle Maintenance Supervisor	090260
27.0351	Veteran and Administrative Clerk	090261
22.1903	Warehouse Worker	041905

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
27.0800	City Government	173200
25.0101	Accountant I	140101
25.0102	Bookkeeper	140102
25.0801	Administrative Assistant I	140803
27.0801	Administrative Services Coordinator	173201
26.0101	Air Conditioning Maintenanceman	170102
27.0802	Airport Maintenance Foreman	173202
27.0803	Airport Manager	173203
27.0804	Airport Operations Supervisor	173204
27.0805	Airport Police Officer	173205
27.0806	Airport Police Supervisor	173206
27.0807	Aquatic Leader	173207
27.0808	Architect	173208
27.0809	Associate Planner	173209
27.0810	Athletic Supervisor	173210
27.0811	Auditorium Clerk	173211
27.0812	Auditorium Manager	173212
25.0205	Auto. Data Processing Operations Supervisor	140206
26.0302	Automotive Mechanic I	170301
26.0305	Automotive Paint and Body Man I	170402
27.0813	Battalion Chief	173213
27.0814	Beach Patrol Captain	173214
27.0815	Bridgentender	173215
27.0816	Building Inspector I	173216
27.0817	Building Maintenance Foreman	173217
22.2005	Buyer	042209
26.1001	Carpenter (Maintenance)	170901
27.0818	Cemetary Manager	173218
27.0819	Central Services Administrator	173219
27.0820	Chief Code Compliance Inspector	173220
27.0821	Chief Product Control Inspector	173221
27.0822	City Clerk	173222
27.0823	City Engineer	173223
27.0824	City Planner	173224
27.0825	City Treasurer and Collector	173225
27.0826	Civil Engineer I	173226
25.0303	Clerk I	140302
25.0703	Stenographer I	140703
25.0902	Clerk Typist I	140301
27.0827	Communications Service Officer	173227
27.0828	Communications Technician	173228
27.0829	Community Affairs Representative I	173229
25.0201	Computer Operator I	140203
27.0830	Custodial Foreman	173230
27.0831	Customer Serviceman I	173231
27.0832	Data Control Clerk	173232
26.1200	Diesel Technician	171101
27.0833	Director of Building and Zoning	173233
27.0834	Director of Community Affairs and Housing	173234
27.0835	Director of Dept. of Solid Waste Management	173235
27.0836	Director of Finance	173236
27.0837	Docks and Waterways Foreman	173237
27.0838	Documentation Clerk	173238

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
27.0800	City Government	173200
27.0839	Driver-Engineer	173239
25.0301	Duplicating Equipment Operator	140304
27.0840	Electrical Inspector I	173240
27.0841	Electrician I (Maintenance)	173241
27.0842	Electro-Technician I	173242
27.0843	Engineering Aide	173243
27.0844	Engineering Draftsman I	173244
27.0845	Engineering Inspector I	173245
27.0846	Engineering Services Supervisor	173246
27.0847	Environmental Biologist	173247
27.0848	Environmental Chemist	173248
27.0849	Environmental Laboratory Technician	173249
27.0850	Environmental Service Coordinator	173250
27.0851	Fabricator-Welder	173251
27.0852	Financial Analyst	173252
27.0101	Fire Captain	172206
27.0102	Fire Chief	172207
27.0103	Firefighter	172201
27.0104	Fire Lieutenant	172208
27.0105	Fire Unit Dispatcher	172209
27.0853	Fleet Superintendent	173253
27.0854	Garage Supervisor	173254
26.1103	Heavy Equipment Operator	171103
27.0855	Incinerator Maintenance Mechanic I	173255
27.0856	Incinerator Operator I	173256
27.0857	Incinerator Plant Supervisor	173257
27.0858	Industrial Airpark Coordinator	173258
23.0301	Industrial Nurse	070301
27.0859	Instrument Technician I	173259
25.0107	Internal Auditor	140105
25.0306	Key Punch Operator	140313
27.0860	Labor Relations Officer	173260
21.0504	Landscape Architect	010504
27.0861	Landscape Inspector I	173261
27.0862	Legal Administrative Assistant	173262
27.0863	Legal Secretary I	173263
27.0864	License Inspector	173264
27.0865	Lifeguard	173265
27.0866	Maintenance Machinist	173266
27.0867	Maintenance Mechanic	173267
27.0868	Maintenance Supervisor	173268
26.1004	Mason/Plasterer	170902
27.0869	Mechanical Inspector I	173269
27.0870	Meter Reader	173270
27.0871	Mobile Equipment Supervisor	173271
27.0872	Mobile Parts Expediter	173272
27.0873	Municipal Maintenanceman I	173273
21.0505	Nursery Foreman	010505
27.0874	Organized Crime Analyst	173274
27.0875	Painter (Maintenance)	173275
27.0876	Park Ranger	173276
27.0877	Parking Lot Attendant	173277
27.0878	Parking Manager	173278

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
27.0800	City Government	173200
27.0879	Parking Meter Checker	173279
27.0880	Parking Meter Serviceman I	173280
27.0881	Parking System Supervisor	173281
27.0882	Parks Foreman	173282
27.0883	Parks Superintendent	173283
27.0884	Parks Supervisor	173284
27.0885	Party Chief	173285
27.0886	Paymaster	173286
25.0601	Personnel Director	140601
25.0603	Personnel Records Clerk	140602
25.0602	Personnel Technician	140603
27.0887	Pest Control Foreman	173287
27.0888	Pest Control Supervisor	173288
27.0889	Pest Controlman	173289
27.0890	Planning Assistant	173290
27.0891	Planning Technician	173291
27.0892	Plumber (Maintenance)	173292
27.0893	Plumbing Inspector I	173293
27.0894	Police Aide	173294
27.0895	Police Cadet	173295
27.0896	Police Captain	173296
27.0897	Police Chief	173297
27.0898	Police Lieutenant	173298
27.0899	Police Major	173299
27.1101	Police Officer	173301
27.1102	Police Sergeant	173302
27.1103	Pool Maintenanceman	173303
27.1104	Print Shop Supervisor	173304
27.1105	Programmer I	173305
27.1106	Property Control Clerk	173306
27.1107	Property Control Supervisor	173307
27.1108	Public Works Director	173308
22.2001	Purchasing Agent	042207
25.0406	Receptionist	140402
27.1109	Recreation Director	173309
27.1110	Recreation Leader I	173310
27.1111	Recreation Superintendent	173311
27.1112	Refrigerant Mechanic	173312
27.1113	Refuse Collector I	173313
27.1114	Refuse Foreman	173314
27.1115	Relocation Aide	173315
27.1116	Research Engineer	173316
27.1117	Right-of-Way Agent	173317
27.1118	Right-of-Way Aide	173318
27.1119	Risk Manager	173319
27.1120	Safety Supervisor	173320
27.1121	Sanitation Field Supervisor	173321
27.1122	Sanitation Operator I	173322
25.0702	Secretary I	140702
27.1123	Service Clerk	173323
27.1124	Sewage Transmission Supervisor	173324
27.1125	Sign Painter	173325
27.1126	Software Specialist	173326

C.C. CODE	DESCRIPTIVE TITLE	USOE CODE
27.0800	City Government	173200
27.1127	Stadium Maintenance Foreman	173327
27.1128	Storekeeper I	173328
27.1129	Streets Foreman	173329
27.1130	Streets Supervisor	173330
27.1131	Streets Superintendent	173331
27.1132	Supervisor of Marine Facilities	173332
27.1133	Surveyor	173333
22.9901	Switchboard Operator I	140403
27.1134	Systems Administrator	173334
25.0204	Systems Analyst	140201
27.1135	Technical Clerk	173335
27.1136	Tennis Supervisor	173336
27.1137	Training Officer	173337
27.1138	Unit Dispatcher	173338
27.1139	Utilities Aide	173339
27.1140	Utilities Director	173340
27.1141	Utilities Maintenance Superintendent	173341
27.1142	Utilities Maintenance Supervisor	173342
27.1143	Utilities Mechanic I	173343
27.1144	Utilities Mechanic Helper	173344
27.1145	Utilities Wastewater Treatment Supervisor	173345
27.1146	Utilities Water Treatment Supervisor	173346
27.1147	Victim Ombudsman	173347
27.1148	Wastewater Operations Superintendent	173348
27.1149	Wastewater Treatment Plant Operator I	173349
27.1150	Watchman	173350
27.1151	Water Distribution Supervisor	173351
27.1152	Water Operations Superintendent	173352
27.1153	Water Treatment Plant Operator I	173353
27.1154	Weighmaster	173354
27.1155	Welder	173355
27.1156	Word Processing Operator	173356
27.1157	Word Processing Supervisor	173357
27.1158	Youth Guidance Advisor	173358
27.1159	Zoning Inspector I	173359
27.0402	Library Personnel	090263
26.1014	Laborers	170914
	City Administrators/Managers	
25.0102	Accounting Clerks	140102
26.1102	General Maintenance	17 005
21.0308	Golf Personnel	010306
23.0907	Rescue Squadmen	070801

Appendix F

broward community college

administrative offices
225 east las olas boulevard
fort lauderdale, florida 33301

April 6, 1978

Dear

Recently you participated in the Broward County Training Needs Assessment Survey being conducted by Broward Community College. The survey is now near completion. We have found the major employers in Broward County to be very cooperative and informative in this effort to determine the educational and training needs of business and industry in our community.

In order to complete the survey and evaluate the findings, it is necessary to have all sections of the questionnaire in our office by April 28th. If you still have the section of the questionnaire describing positions, education levels and experience, please try to complete it and return it to our office by the end of April.

We would like to take this opportunity to thank you for your time and cooperation. If you have any questions regarding the project, please do not hesitate to call us at (467-6700, Ext. 235).

Sincerely,

Dr. Mantha Vlahos
Director of Institutional Research
and Systems Planning

MV:jat

cc: K. K. Mann
P. Hersom
J. Johnson
J. Skudlarek

Appendix G

broward community college

administrative offices
225 east las olas boulevard
fort lauderdale, florida 33301

July 11, 1978

Dear

Broward Community College's Training Needs Assessment is in the final stages. We have gathered many valuable facts and ideas to aid us in planning to meet the educational and training needs of Broward County's major employers.

As one of the County's major employers your input on our final results is very valuable. The evaluation of the findings will be incomplete without your list of current and future employment needs. We have already included the data from our interview with you in the computer analysis of responses to the questionnaire. We appreciate that you have taken the time and effort to talk to our interviewers to discuss your needs. We sincerely hope that your interest in our project is still active, and that you will take the time to complete the second phase of our interview. We hope to have the most complete and accurate data possible.

Once again, thank you for your time and cooperation. Please complete the enclosed forms and return them to our office as soon as possible in order to help us complete our evaluation.

Sincerely,

Mantha Vlahos Mehallis

Dr. Mantha V. Mehallis
Director of Institutional
Research and Systems Planning

Kathleen Koontz Mann

Kathleen K. Mann
Project Coordinator

KKM/ne

broward community college

administrative offices
225 east las olas boulevard
fort lauderdale, florida 33301

October 2, 1978

Dear Training Needs Assessment Participants:

Broward Community College has completed the study undertaken last year to assess the educational training needs of Broward County business, industry and government. The project was funded by BETA and conducted in conjunction with the Broward Industrial Board and the Fort Lauderdale Area Chamber of Commerce. As a participant in the personal interviews, we would like to thank you for your pertinent and valuable information.

We have compiled and analyzed the data collected during the interviews and are sending highlights of the results to you in the enclosed brochure and Fact Sheet. The brochure includes a description of the project, major findings, charts of positive survey responses, and survey conclusions. The Fact Sheets compare general responses to responses for all businesses similar to your own. A detailed report is also on file in our Office of Institutional Research. Additional information specific to your concerns may be received from the office upon request (contact Dr. Mehallis, 467-6700, ext. 232).

During the next year, we will begin developing programs to meet some of the highest demand occupational areas. You may be asked to assist us with the design of the curricula, so that the educational institutions can begin training persons qualified to meet your specific needs. Again, we thank you for your participation in this very worthwhile endeavor. We hope to further the excellent relationship which is developing between the college and business, industry, and government of our community.

Sincerely,

Mantha Vlahos Mehallis

Dr. Mantha Vlahos Mehallis
Director of Institutional
Research and Systems Planning

Kathleen Koontz

Kathleen Koontz
Project Coordinator

BROWARD COUNTY TRAINING NEEDS ASSESSMENT SURVEY

BROWARD COMMUNITY COLLEGE

OFFICE OF INSTITUTIONAL RESEARCH
AND SYSTEMS PLANNING
1977 - 1978

7

Broward County Training Needs Assessment Survey

1. What is your position in the company? (Please circle)

    1. President or Vice-President
    2. Personnel Manager
    3. Public Relations
    4. Training Director
    5. Other (Specify): ____________________

2. What is the most important quality you look for in employee candidates? (Please circle Only one)

    1. Basic skills (Reading, spelling, mathematics)
    2. Prior qualifications (Skill training, experience)
    3. Interest
    4. Personality
    5. Ambition
    6. Personal appearance
    7. Work attitude
    8. Responsibility
    9. Other (Specify): ____________________

3. Please answer Yes or No to the following questions:
Are your present employees adequately prepared for your needs in...

	Yes	No
1. Basic skills (Reading, spelling, mathematics)	1	2
2. Technical skills	1	2
3. Management skills	1	2
4. Work attitude	1	2
5. Sense of personal responsibility	1	2
6. Ability to get along with co-workers	1	2

4. Do you anticipate any new products or services within the next 5 years that will create a need for new job positions? (Please circle)

    1. Yes

    2. No (Skip to Item #6)

5. What position(s) will be needed?

    ____

    ____

    ____

    ____

6. Do you anticipate any cut backs in products or services that will modify or eliminate positions within the next 5 years? (Please circle)

    1. Yes

    2. No (Skip to Item #8)

7. What position(s) will be changed?

    ____

    ____

    ____

    ____

8. Are there any positions that you have had difficulty in filling? (Please circle)

    1. Yes

    2. No (Skip to Item #10)

9. What are the positions and what is the most prevalent reason for the difficulty in filling each position?

Positions	Reasons

10. What recruitment sources do you use to fill positions? (Please circle as many as apply)

    1. Private employment agencies
    2. Florida State Employment Service
    3. Newspaper ads
    4. Employee referrals
    5. College, high school, or technical school placement offices
    6. Professional publications
    7. Other public agencies
    8. Other (Specify): ______________________

11. Who currently orients your new personnel before they begin the job? (Please circle)

    1. Personnel Manager
    2. Training Director
    3. Department Head or Supervisor
    4. Co-workers
    5. Other (Specify): ______________________

12. Do you conduct supplemental training to upgrade employees? (Please circle)

    1. Yes

    2. No (Skip to Item #14)

13. Who currently conducts supplemental training? (Please circle as many as apply)

    1. Personnel Manager

    2. Training Director

    3. Department Head or Supervisor

    4. Co-workers

    5. Company School within Broward County

    6. Company School outside of Broward County

    7. Outside Agency (Specify): ____________________

    8. Other (Specify): ____________________

14. Do you have any specific training needs that are not being met? (Please circle)

    1. Yes

    2. No (Skip to Item #16)

15. What are the positions and what skills are needed for each?

Positions	Skills: (1) Personal, Behavioral (2) Technical (3) Managerial

16. Do you have any position(s) with a high turn-over of employees? (Please circle)

    1. Yes

    2. No (Skip to Item #18)

17. What are the positions and what is the most prevalent reason for the turn-over in each position?

Positions	Reasons

18. How do employees advance within the company? (Please circle as many as apply)

    1. Seniority

    2. Additional on the job training

    3. Further outside schooling

    4. Promotion on merit

    5. Performance evaluation

    6. Testing

    7. Other (Specify): ______________________________

19. If you have a management level position open, do you try to fill it... (Please circle)

    1. From within

    2. Or from outside your company?

20. Would you be interested in having any of the educational agencies in Broward County, such as, universities, community colleges, technical schools or public schools, establish training programs to meet your needs? (Please circle)

    1. Yes

    2. No (Skip to item #22)

21. Where would you prefer that this training take place? (Please circle)

    1. On site

    2. At one of the colleges or schools

    3. Other (Specify): ______________________________

22. What incentives do you currently offer for employees taking further training? (Please circle as many as apply)

    1. Release time from work

    2. Company payment

    3. Possible subsequent promotion

    4. None

    5. Other (Specify): ______________________________

23. Would you be willing to offer incentives for new training programs developed by the educational agencies in Broward County? (Please circle)

    1. Yes

    2. No (Skip to item #25)

24. What types of incentives would you offer? (Please circle as many as apply)

    1. Release time from work
    2. Company payment
    3. Possible subsequent promotion
    4. None
    5. Other (Specify): ______________________________

25. Have you ever hired any handicapped persons? (Please circle)

    1. Yes

    (Nature of handicap _if_ volunteered): ______________________

    2. No

26. Would you be willing to participate in special training programs to train handicapped persons for jobs in your company? (Please circle one)

    1. Definitely would participate
    2. Might participate but with reservations
    3. Undecided
    4. Would prefer not to participate
    5. Definitely do not want to participate

27. Does your company have an Affirmative Action Plan? (Please circle)

    1. Yes
    2. No

Current Program Offerings by Educational Institutions

	Agriculture									Home Economics							Public & Social Services												
	Agricultural Science	Agriculture Resources	Crops	Floral Design	Landscape & Turf Development	Livestock/Poultry	Nursery Operations	Pest Control	Custom Drapes	Dietetic Aide/Dietitian	Draping and Pattern Making	Fashion Design	Home Economics Homemaking	Tailoring	Upholstery	Child Care Development	Fire Science	Funeral Service	Occupational Safety	Police Science/Criminal Justice	Pumping Plants	Recreational Leadership	Teacher Assistant/Teaching	Water/Waste Water Plant Operation	Public Administration	Tourism Industries	Corrections	Crime Scene Technology	Pollution Prevention & Control
Vocational Tech. Schools																													
Atlantic Voc Center										X					X														
Downtown Adult Center													X																
B. F. James Adult Center				X	X				X				X		X	X													
Sheridan Voc. Center										X						X				X									
Br. Co. High Schools	X	X	X	X	X	X	X			X			X			X					X								
Community Colleges																													
Broward Com. Colleges	X				X		X	X		X		X					X			X			X	X	X	X	X	X	X
Miami-Dade Com. College					X		X			X	X	X	X	X		X	X	X	X	X		X	X	X		X	X		X
Universities/Colleges -																													
Art Inst. of Ft. Lauderdale												X																	
Barry College										X			X										X						
Biscayne College																				X		X							
F.A.U.																				X			X						
F.I.U.										X			X									X	X			X			
Ft. Lauderdale College																													
Nova College																				X			X						
Nova University																				X			X						
Prospect Hall College												X																	
University of Miami																							X						

	Marketing-Distributive											Management							Secretarial					Business & Office Services								Data Processing			
	Advertising/Public Relations	Cashier Checker	Fashion Merchandising	Fashion Modeling	Hotel Training/PBX	Insurance	Marketing	Real Estate	Retailing/Merchandising	Tax Preparation	Travel Agency (Tourism)	Health Administration	Hotel Restaurant Institutional Management	Management and Supervision	Public Administration	Real Estate Management	Training Personnel	Transportation & Traffic Management	Court Reporting	Legal - Secretarial	Medical - Secretarial	Office Procedures	Stenographer (Exec. Secretary) Shorthand	Accounting	Accounting Machines	Banking and Finance	Bookkeeping	Business (General)	General Office Careers	Savings & Loan	Small Business Administration	Business Information Systems	Computer Operator	Computer Programming	Key Punch - Unit Record
Vocational Tech. Schools																																			
Atlantic Voc. Center					X			X			X		X							X	X	X	X	X	X		X	X	X						
Downtown Adult Center																							X		X			X	X						
B. F. James Adult Center		X				X		X	X	X	X			X								X	X				X	X							
Sheridan Voc. Center					X						X			X			X		X	X	X	X	X	X	X		X	X	X				X		X
Br. Co. High Schools	X	X	X			X	X	X	X		X		X	X		X		X		X	X	X	X	X	X	X	X	X	X			X			X
Community Colleges																																			
Broward Com. Colleges			X			X	X	X	X	X	X		X	X	X	X			X	X	X	X	X	X		X		X		X		X		X	
Miami-Dade Com. College	X		X	X	X	X	X	X	X		X		X	X		X		X	X	X	X	X	X	X	X	X		X	X			X			
Universities/Colleges																																			
Art Inst. of Ft Lauderdale			X																																
Barry College			X				X							X										X				X	X						
Biscayne College															X													X							
F A U.						X	X	X	X			X		X		X						X	X	X		X		X	X			X		X	
F.I.U.			X			X	X	X			X		X	X		X		X						X		X		X				X	X	X	X
Ft Lauderdale College							X	X					X	X		X				X	X	X	X	X				X	X			X	X	X	X
Nova College	X						X							X										X		X							X	X	
Nova University														X														X						X	
Prospect Hall College			X								X		X	X					X			X	X	X				X	X						
University of Miami						X	X	X						X		X		X						X		X		X				X	X	X	X

	Health																					
	Cardiovascular Technology	Dental Assistant	Dental Hygiene	Dental Technician	Electroencephalographic Technology	Emergency Care Specialist	Emergency Medical Technology	Hospital Ward Clerk	Medical Laboratory Technology	Medical Office Assistant	Medical Record Technology	Mental Health Technology	Nurse – Aide/Nurse Assistant	Practical Nursing	Nursing-Associate Degree (RN)	Operating Room	Optometric Technical Sciences	Physical Therapy Technology	Radiologic Technology	Respiratory Therapy Technology	Respiratory Technology	Veterinary Medical Assisting
Vocational Tech. Schools																						
Atlantic Voc. Center								X					X	X								
Downtown Adult Center																						
B. F. James Adult Center						X																
Sheridan Voc. Center								X	X				X	X		X						
Br. Co. High Schools													X									
Community Colleges																						
Broward Com. Colleges		X	X	X			X		X						X			X	X	X		X
Miami-Dade Com. College	X		X		X	X	X		X			X		X	X	X		X	X	X	X	
Universities/Colleges																						
Art Inst. of Ft. Lauderdale																						
Barry College									X						X							
Biscayne College																						
F.A.U.																						
F.I.U.							X		X		X	X			X			X				
Ft. Lauderdale College																						
Nova College		X																				
Nova University																						
Prospect Hall College																						
University of Miami									X						X							

	Trades-Crafts																										
	Agriculture Mechanic	Appliance Repair	Apparel (Management/Manufacturing)	Automotive - Air Conditioning	Automotive Body Repair & Refinishing	Automotive Mechanics	Aviation Mechanics	Business Machine Repair	Commercial Cooking/Baking/Food Serv	Commercial Photography	Cosmetology	Custodial and Building Maintenance	Diesel Engine Mechanics	Digital Computer Repairs	Electric Motor Mechanics	Glazing	Heavy Equipment Operator	Marine Engine Mechanics	Meat Cutting	Millwork/Cabinet Work	Plumbing/Pipefitting	Radio and TV Servicing	Small Engine Repair	Truck Driving	Truck Mechanics	Watch Repair	Welding
Vocational Tech. Schools																											
Atlantic Voc. Center					X				X										X			X					X
Downtown Adult Center																											
B. F. James Adult Center									X	X		X						X									
Sheridan Voc. Center			X	X	X	X					X			X													
Br Co High Schools	X	X	X			X		X	X	X		X			X	X	X			X	X		X				X
Community Colleges																											
Broward Com. Colleges									X																		
Miami-Dade Com. College			X			X			X	X	X																
Universities/Colleges																											
Art Inst. of Ft. Lauderdale										X																	
Barry College																											
Biscayne College																											
F.A.U.																											
F.I.U.																											
Ft. Lauderdale College																											
Nova College																											
Nova University																											
Prospect Hall College																											
University of Miami																											

	Technology (Engineering - Industrial)																									
	Air Conditioning/Refrigeration	Air Traffic Control	Architecture	Aviation Administration	Aviation Engineering	Aviation - Flight Attendant/Airline Careers	Aviation - Air Frame/Power Plant	Aviation - Pilot	Building Construction Carpenter Mason	Cinema	Civil Engineering	Commercial Art & Advertising Design	Drafting Blue Print Reading	Electrical Distribution/Engineering	Electromechanical	Electronics Assembly - Wiring	Environmental Control	Graphics Arts Printing	Industrial Materials & Processes	Interior Design	Instrumentation	Journalism	Marine Science	Mechanical Industrial Eng. - Machine Shop	Meteorologist Analysis	Radio Television Broadcast
Vocational Tech. Schools																										
Atlantic Voc. Center	X								X																	
Downtown Adult Center																										
B. F. James Adult Center													X													
Sheridan Voc. Center													X			X								X		
Br. Co High Schools	X	X		X					X			X	X		X			X	X	X			X	X		
Community Colleges																										
Broward Com. Colleges	X	X	X	X		X		X	X		X	X	X	X		X	X			X				X		X
Miami-Dade Com. College	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X
Universities/Colleges																										
Art Inst. of Ft. Lauderdale												X								X						
Barry College																										
Biscayne College																										
F.A.U.														X									X	X		X
F.I.U.			X											X			X			X				X		
Ft. Lauderdale College																										X
Nova College																						X				X
Nova University																	X						X	X		
Prospect Hall College				X																						
University of Miami			X								X			X									X	X		X

Broward County Private Trade Schools

AUTO REPAIR

National Auto Tune-up Center

AVIATION

Bradley Aviation, Inc.
Sky-Tell Aviation
Sunstream Aviation, Inc.

BARTENDING

Advanced School of Bartending and Mixology
Master School of Bartending

BROADCASTING

Brown Institute

BUSINESS

Adelphi Business School
Broward Business School
Broward School of Machine Shorthand
Charron Williams College
Court Reporting Institute of Florida
H & B Schools, Inc.
Health Careers Academy
Le Bridge Legal Secretarial School, Inc.

CASHIERING

Cashier Training of Broward, Inc.

COMPUTER

Institute of Computer Technology

COOKING

Varketta's, Ralph Cooking School

CONSTRUCTION

Allstate Construction College
Broward County Carpenters

COSMETOLOGY

Frederich Hair Styling Academy
Hollywood College of Beauty Culture
Kree Institute of Electrolysis
Luella & Porters School of Beauty
Ray Mar Beauty College
Robinson Beauty School

FASHION

Fashion Institute of America in Fort Lauderdale
Fashion Merchandising Institute of Florida

FLORAL DESIGN

Wilton Manors Florist

INDUSTRIAL

Arma Training Center, Inc.
RETS - Electronic School
South Florida Technical Institute

INTERIOR DESIGN

School for Interior Decoration and Design

MARINE ARTS

Jack Blakes School of Diving
Ocean Learning Institute

MODELING

Barbizon School of Modeling
Carsons Gayle Careers School
John Robert Powers

MOTIVATION

Leadership Training Institute of South Florida
Nova Development Institute

PERFORMING ARTS

Atlantic Foundation for the Performing Arts

PET GROOMING

Merryfield Kennels

REAL ESTATE

Century 21 Academy of Real Estate
Gold Coast School of Real Estate
Jordan Rudi Real Estate School

TRAVEL

Hollywood School of Travel

Program Areas Where One or No Programs Are Currently Being Offered in Southeast Florida

Distributive

Fashion Modeling - MDCC

Health

Electronencephalographic Technology - MDCC
Respiratory Technology - MDCC

Home Economics

Draping & Pattern Making - MDCC
Tailoring - MDCC

Office

Health Administration - FAU
Public Administration - Biscayne College
Training Personnel - Sheridan Vocational Center

Trades & Industrial

Aviation Mechanics - None
Diesel Engine Mechanics - None
Truck Driving - None
Truck Mechanics - None
Watch Repair - None

Technical

Aviation Engineering - MDCC
Aviation Simulator Instructor - MDCC
Cinema - None
Electromechanical - None
Instrumentation - MDCC
Journalism - None
Meterologist Analysis - MDCC

Public Service

Funeral Service - MDCC
Occupational Safety - MDCC
Pumping Plants - Broward County High Schools

Projected Job Demand, Educational & Experience Requirements

By Occupational Category Based Upon 2-Year Projections

Key To Education Levels

1. No minimum education required
2. High School
3. 2 Year College Degree (Associate of Arts, Associate of Science) or Trade School
4. 1 Year College Certificate
5. 4 Year College Bachelor's Degree
6. Graduate work or Professional Degree

Occupational Category 21.0000 010000	Projected Number of Employees					
Nurseries/Florists/Landscapers	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Laborers	16	26	26	26	None	No
Local Truck Drivers	12	14	14	16	None	Yes
Floral Designers	12	12	12	20	None	Yes
Managers	8	9	9	11	None	Yes
Floral Consultants	8	8	8	12	None	Yes
Secretaries	6	7	7	8	None	Yes

Occupational Category 21.0101 010101	Projected Number of Employees					
Taxidermist	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Marine Taxidermists	50	55	55	60	None	No
Managers	5	5	5	5	High Sch.	Yes
Secretaries	2	2	2	3	None	No
Bookkeepers	2	2	2	3	High Sch.	No

Occupational Category 21.0200 160200	Projected Number of Employees					
Pest Control Services	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Monthly Sales People	6	6	7	8	None	No
Pest Control Technicians	7	7	7	8	None	No
Termite Control Sales People	3	3	3	4	None	No
Lawn Control Sales People	3	3	3	4	None	No
Bookkeepers	2	2	2	3	None	No
Route Supervisors	1	1	2	2	None	Yes
Managers	2	2	2	2	None	Yes

Occupational Category 21.0300 010300	Projected Number of Employees					
Country Clubs/Golf Courses	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Waiters/Waitresses	89	90	92	96	None	Yes
Cooks/Chefs	44	44	45	46	None	Yes
Landscape Technicians	41	41	41	41	None	No
Bus Boys	29	30	31	31	None	No
General Building Maintenance	26	27	27	27	None	Yes
Managers	22	22	22	22	None - 2 Yr. Deg.	Yes

Occupational Category 22.0300 040300	Projected Number of Employees					
Auto Dealerships	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Sales People	473	502	516	537	None - 1 Yr. Cert.	Yes
Automotive Mechanics	420	471	496	513	None - 2 Yr. Deg.	Yes
Department Managers	137	142	146	148	None - 4 Yr. Deg.	Yes
Bookkeepers	78	76	80	81	None - 4 Yr. Deg.	Yes
Service Advisors	69	74	75	78	None - 2 Yr. Deg.	Yes
Automobile Parts Sales People	65	67	73	77	None - 2 Yr. Deg.	Yes
Porters - Get Ready Men	58	61	63	63	None - High Sch.	No
Body Shop Workers	56	61	63	66	None - 2 Yr. Deg.	Yes
Sales Managers	59	60	61	61	None - 4 Yr. Deg.	Yes
Housekeeping Personnel	59	59	60	60	None	No

Occupational Category 22.0300 040300	Projected Number of Employees					
Auto Leasing	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Drivers	111	120	150	175	High Sch.	No
Automobile Mechanics	40	42	50	61	None - High Sch.	No
Dispatchers	12	12	16	16	High Sch.	No
Bookkeepers	14	14	15	18	High Sch.	No
Reservationists	5	5	6	7	High Sch.	No
Automobile Parts Supervisors	6	6	6	6	High Sch.	No

Occupational Category 22.0400 040400	Projected Number of Employees					
Banks/Savings & Loans	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Tellers	255	275	302	347	None - High Sch.	No
Managers	86	90	102	123	High Sch. 2 Yr. Deg.	Yes
File Clerks	63	65	70	80	None - High Sch.	No
Savings Counselors	35	40	43	49	High Sch.	Yes
Loan Processing Clerks	35	37	40	46	None - High Sch.	Yes
Secretaries	33	35	38	45	High Sch.	Yes
Head Tellers	25	27	32	42	High Sch.	Yes
Mortgage Officers	21	24	31	39	High Sch. 4 Yr. Deg.	Yes
Appraisers	24	26	30	38	High Sch. 4 Yr. Deg.	Yes
Loan Servicing Clerks	25	27	29	35	None High Sch.	No

Occupational Category 22.0400 040400	Projected Number of Employees					
Commercial Banks	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Tellers	343	365	385	407	High Sch.	No
Bookkeepers	158	167	176	188	High Sch.	No
Managers	79	85	92	102	High Sch. 2 Yr. Deg.	Yes
Loan Officers	69	76	82	91	High Sch. 1 Yr Cert.	Yes
Secretaries	63	69	80	88	High Sch.	Yes
Loan Processing Clerks	64	67	72	78	High Sch. 2 Yr. Deg.	Yes
Typists	46	55	62	70	High Sch.	No
Operations Officers	37	41	47	56	None - 4 Yr. Deg.	Yes
Proof Machine Operators	35	41	44	47	High Sch.	No
Head Tellers	26	30	34	39	High Sch. 1 Yr Cert.	Yes
Customer Service Representatives	28	32	34	34	High Sch.	No

Occupational Category 22.0450 040406	Projected Number of Employees					
Stock Brokers	Current # of Employees	1 Year from Now	2 Year from Now	5 Years from Now	Minimum Education Required	Experience Required
Stock Brokers	22	27	37	48	None	Yes
Sales Assistant Secretary	5	6	7	12	None	No
Cashiers	2	3	3	4	None	No
Managers/Administrators	2	3	3	4	2 Yr. Deg.	Yes

Occupational Category 22.0600 040600	Projected Number of Employees					
Retail Grocers/Wholesalers	Current # of Employees	1 Year	2 Years	5 Years	Minimum Education Required	Experience Required
Managers	209	239	268	301	None - High Sch.	Yes
Cashiers	172	185	198	281	None - High Sch.	Yes
Truck Drivers	74	79	83	89	None - High Sch.	No
General Production	80	80	80	80	None	No
Stock Clerks	46	46	46	52	None - High Sch.	No
Bar Personnel	40	40	45	50	None	Yes
Bookkeepers	42	42	43	44	None - High Sch.	Yes
Packing Personnel	30	30	35	40	None	No
Warehouse Men	28	31	34	37	None - High Sch.	No
Route People	34	34	34	49	None	No

Occupational Category 22.0700 040700	Projected Number of Employees					
Food Services	Current # of Employees	1 Year from Now	2 Years from Now	5 Year from Now	Minimum Education Required	Experience Required
Food & Equipment Handlers	45	47	48	52	High Sch.	Yes
Food Preparation Personnel	40	43	45	50	None	Yes
Managers	34	39	44	50	High Sch. 2 Yr. Deg.	Yes
Dishwasher Operators	24	28	31	35	None	No
Cashiers	18	22	26	30	High Sch.	No
Cooks & Chefs	16	19	22	27	High Sch.	Yes

Occupational Category 22.1100 041100	Projected Number of Employees					
Hotels & Restaurants	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Waiters/Waitresses	438	504	519	566	None - High Sch.	No
Maids	319	355	359	365	None	No
Housekeeping Personnel	240	265	276	288	None - High Sch.	No
Cooks & Chefs	192	191	200	216	None - 2 Yr. Deg.	Yes
Desk Clerks	141	156	162	169	None - 2 Yr. Deg.	No
Bartenders	134	151	156	163	None High Sch.	Yes
Bell Captains & Bellmen	125	139	141	145	None - High Sch.	No
Bus Boys	117	131	138	145	None	No
Dishwasher Operators	134	155	132	168	None - High Sch.	No
Housemen	85	96	101	107	None	No
Hotel Managers & Assistants	83	93	95	101	None 4 Yr. Deg.	Yes

Occupational Category 22.1100 041100	Projected Number of Employees					
Restaurants/Nightclubs	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Waiters/Waitresses	1529	2222	2775	4928	None - High Sch	Yes
Cooks & Chefs	622	688	794	1068	None - 2 Yr. Deg.	Yes
Managers	235	324	428	680	None - 4 Yr. Deg.	Yes
Cashiers	229	332	369	409	None - High Sch.	Yes
Food Checkers	123	157	361	361	None - High Sch.	No
Bus Boys	295	336	346	363	None - High Sch.	No
Dishwasher Operators	270	285	301	317	None - High Sch.	No
Bartenders	129	147	149	151	None - 2 Yr. Deg.	Yes
Counter Help	78	90	90	90	None - High Sch.	No
Parking Attendants	69	84	84	85	None	No

Occupational Category 22.1300 041700	Projected Number of Employees					
Insurance Companies/Property Mgmt.	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Insurance Agents/Brokers	402	488	563	661	None - 1 Yr Cert	No
Claims Adjustors	263	263	263	263	None - 4 Yr. Deg	Yes
Secretaries	99	105	113	125	None - High Sch.	Yes
Managers	97	97	98	101	None - 4 Yr. Deg	Yes
Housekeeping Personnel	86	86	86	86	None	No
General Maintenance	45	47	49	52	None - High Sch.	No
Sales Managers/Supervisors	34	38	40	51	None - 4 Yr. Deg	Yes
Bookkeepers	36	37	37	48	None - 2 Yr. Deg	Yes
Typists	36	37	37	38	None - 1 Yr Cert.	No
File Clerks	33	34	34	37	None - High Sch.	No

Occupational Category 22.1600 041600	Projected Number of Employees					
Petroleum Services	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Station Attendants	165	173	191	214	None	No
Truck Drivers	66	66	68	70	None	Yes
Managers	38	40	42	47	None	Yes
Terminal Operators	18	19	21	24	None - High Sch.	No
Supervisors	18	18	18	19	None - High Sch.	Yes
Mechanics	15	15	15	15	None	Yes

Occupational Category 22.1700 041700	Projected Number of Employees					
Real Estate/Land Development	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Managers	40	40	41	41	2 Yr. Deg. 4 Yr. Deg.	Yes
Secretaries	24	25	25	25	None - High Sch.	Yes
Bookkeepers	17	19	19	19	None - High Sch.	Yes
Survey Instrument Men	8	8	11	11	High Sch.	Yes
Draftsmen	8	9	10	11	High Sch.	Yes
Project Representatives	6	6	7	8	High Sch.	Yes

Occupational Category 22.1800 041800	Projected Number of Employees					
Amusements/Race Tracks	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Cleaning Personnel	100	100	100	100	None	No
Equipment Operators	20	20	20	20	None	No
Landscape Laborers	15	15	15	15	None	No
Maintenance Personnel	10	10	10	10	None	No
Barn Area Laborers	8	8	8	8	None	No

Occupational Category 22.1900 041900	Projected Number of Employees					
Trucking/Moving/Delivery	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Truck Drivers	115	129	133	143	None - High Sch.	Yes
Couriers	60	63	66	70	None	No
Truck Driver's Helpers	23	27	31	41	None	No
Operations Supervisors	25	27	30	34	None - 4 Yr. Deg.	Yes
Managers	22	22	24	27	2 Yr. Deg. 4 Yr. Deg.	Yes
Mechanics	20	21	23	25	None - High Sch.	Yes
Secretaries	17	17	20	21	High Sch. 4 Yr. Deg.	No
Warehouse People	12	14	16	19	High Sch.	Yes
Bookkeepers	10	10	14	14	High Sch. 2 Yr. Deg	Yes
Moving Consultants	11	13	14	16	High Sch.	Yes

Occupational Category 22.2000 042201	Projected Number of Employees					
Department Stores/Retail Business	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Retail Sales Clerks	2889	3140	3334	3573	None - 2 Yr. Deg.	No
Department Managers	437	586	599	627	None - 4 Yr. Deg.	Yes
Stock Clerks	299	320	334	364	None - High Sch.	No
Cashiers	197	253	275	318	None - High Sch.	No
Shipping/Receiving Clerks	195	202	207	223	None - High Sch.	No
Catalog/Customer Service	166	188	193	208	None - High Sch.	Yes
Credit Clerks	205	181	185	194	None - High Sch.	No
Retail Business Managers	153	162	170	183	None - 4 Yr. Deg.	Yes
Bookkeepers	126	136	148	157	None - 1 Yr Cert.	No
Housekeeping Personnel	130	137	140	146	None - High Sch	No.

Occupational Category 23.0000 070000	Projected Number of Employees					
Medical/Hospital	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Registered Nurses	2036	2166	2281	2587	2 Yr. Deg- Grad. Wk.	Yes
Nurses Aides, Orderlies, Attendants	1865	1885	1910	2008	None - 2 Yr. Deg	Yes
Licensed Practical Nurses	1079	1165	1210	1294	High Sch. Grad. Wk.	Yes
Housekeeping Personnel	594	596	622	628	None - High Sch.	Yes
Ward Clerks/Admitting Clerks	429	454	482	492	None - 2 Yr. Deg	Yes
Secretaries	197	201	206	215	None - 1 Yr Cert	Yes
Medical Lab Technicians	172	179	189	203	2 Yr. Deg 4 Yr. Deg	Yes
Cooks & Chefs	157	158	165	168	None - 1 Yr Cert	Yes
Typists	149	155	165	170	None - 2 Yr. Deg	No
Homemaker, Home Health Aides	110	130	160	190	None	No

Occupational Category 23.0909 160519	Projected Number of Employees					
Mortuary Services	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Funeral Directors	25	25	25	25	4 Yr. Deg.	Yes
General Personnel	11	11	13	13	High Sch.	No
Secretaries	8	8	9	9	High Sch.	No
Intern Embalmers	6	8	8	10	High Sch.	Yes
Lead Directors	3	3	3	4	4 Yr. Deg.	Yes

Occupational Category 24.0205 090699	Projected Number of Employees					
Maid/Cleaning Services	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Maids	165	175	200	230	None	No
Drivers/Managers	11	12	15	18	None	No
Secretaries	2	3	5	5	None - High Sch.	Yes
General Managers	2	2	2	2	None - High Sch.	Yes
Sales People	1	1	2	2	High Sch.	Yes

Occupational Category 25.0100 140100	Projected Number of Employees					
Accounting/Computer/Communications	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Telephone Operators	968	974	1081	1091	None - High Sch.	Yes
Service Representatives	613	643	690	838	None - 2 Yr. Deg	Yes
General Bookkeeping Clerks	305	306	320	336	None	Yes
Sales People	181	183	188	191	None - 4 Yr. Deg	Yes
Office Managers	172	175	181	194	None - 4 Yr. Deg	Yes
Bookkeepers	154	154	156	159	None - 2 Yr. Deg	No
Secretaries	145	148	152	157	None - 2 Yr. Deg	Yes
Statistical Clerks	144	147	152	158	None - High Sch.	Yes
Tax Preparers	115	130	145	175	None	Yes
Bill Adjustors	136	136	141	147	None - High Sch.	No

Occupational Category

25.0600 140600

Employment Services	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
	Projected Number of Employees					
Typists	125	125	125	125	None	Yes
General Office Clerks	75	75	75	75	None	No
Bookkeepers	30	30	30	30	High Sch.	Yes
Stenographers	30	30	30	30	High Sch.	Yes
Key Punch Operators	7	14	30	50	2 Yr. Deg.	No
Supervisors	3	3	3	3	None	Yes

Occupational Category 25.0707 160516	Projected Number of Employees					
Law Firms	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Legal Secretaries	75	81	86	96	High Sch.	Yes
Attorneys	48	52	56	66	Grad. Wk.	Yes
Word Processing Typists	14	17	20	25	High Sch. 2 Yr. Deg	Yes
Managers	11	12	13	15	4 Yr. Deg	Yes
Records Clerks	9	9	10	12	High Sch.	No
Bookkeepers	7	7	7	9	High Sch. 2 Yr. Deg	Yes

Occupational Category 26.0101 170102	Projected Number of Employees					
Electrical/Air Conditioning Services	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Electrical Construction Servicemen	55	55	55	55	None	Yes
Air Conditioning Installers	16	16	16	16	None	Yes
Clerical	10	10	10	10	None	Yes
Management	7	7	7	7	None	Yes

Occupational Category 26.0400 170504	Projected Number of Employees					
Airlines	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Aircraft Mechanics	84	90	93	100	None - 2 Yr. Deg	Yes
Managers	49	51	51	52	High Sch.	Yes
Traffic Agents & Clerks	31	31	31	31	High Sch.	No
Flight Engineers	22	24	24	24	High Sch. 2 Yr. Deg	Yes
Pilots	17	20	20	21	High Sch. 2 Yr. Deg	Yes

Occupational Category 26.1000 170900	Projected Number of Employees					
Construction	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Construction Laborers	704	832	845	887	None - High Sch.	No
Construction Machine Operators	585	587	587	587	None - High Sch.	Yes
Carpenters	400	428	433	443	None - High Sch.	Yes
Drivers	174	186	191	217	None	Yes
Painters/Paper Hangers	126	160	167	210	None	No
Foremen	140	149	150	160	None - High Sch.	Yes
Plumbers/Pipefitters	134	138	138	150	None - High Sch.	Yes
Sales People	123	124	126	139	None - 4 Yr. Deg.	Yes
Secretaries	110	117	118	123	None - 2 Yr.	Yes
Bookkeepers	110	114	114	121	None - 4 Yr. Deg.	Yes
Roofers	78	100	112	148	None	Yes
Field Superintendents	93	100	101	102	None - 4 Yr. Deg.	Yes
Managers	96	98	99	104	None - 2 Yr. Deg.	Yes

Occupational Category 26.1011 160103	Projected Number of Employees					
Architectural Occupations	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Equipment Operators	100	100	100	100	None	Yes
Construction Managers	7	7	7	7	High Sch.	Yes
Manufacturing Engineers	7	7	7	7	2 Yr. Deg.	Yes
Printed Circuit Board Designers	6	6	6	6	2 Yr. Deg.	Yes
Machine Designers	5	5	5	5	High Sch.	Yes
Mechanical Designers	5	5	5	5	2 Yr. Deg.	Yes

Occupational Category 26.1106 171006	Projected Number of Employees					
Pool Maintenance	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Service Technicians	25	25	25	25	None	No
Secretaries/Receptionists	6	7	7	7	High Sch.	No
Supervisors	4	4	4	4	None	No
Repairmen	4	4	4	4	None	No

Occupational Category 26.1600 172500	Projected Number of Employees					
Laundries/Dry Cleaning	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Flatwork Personnel	53	54	54	55	None	No
Local Truck Drivers	40	41	42	44	None - High Sch.	Yes
Laundry Production Personnel	30	33	35	36	None	No
Managers	22	23	23	23	None - 2 Yr. Deg.	Yes
Secretaries	21	22	23	24	High Sch.	Yes
Soil Room Operators	19	20	20	21	None	No
Seamstresses	13	15	17	17	None	Yes
Pressers	13	14	16	16	None	No
Engineers	13	13	13	14	Grad. Wk.	Yes
Linen Products Personnel	12	13	13	14	None	No
Checkers	9	11	13	13	None	No

Occupational Category 26.1900 170800	Projected Number of Employees					
Printers/Newspapers/Photographers	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Composing Room Personnel	190	194	295	197	None - High Sch.	Yes
Managers	165	168	171	176	None - 4 Yr. Deg.	Yes
Printing Pressmen & Assistants	136	141	145	149	None - High Sch.	Yes
Sales People	140	141	143	143	None - 2 Yr. Deg.	Yes
Circulation Personnel	100	100	100	100	None	No
Editors	78	79	80	81	High Sch. 4 Yr. Deg.	Yes
Bookkeepers	66	69	71	74	None - High Sch.	Yes
Newspaper Reporters	71	71	71	71	None - 4 Yr. Deg.	Yes
Laborers/Paper Handlers	50	52	55	60	None - High Sch	No
Drivers	49	49	49	49	None	No

Occupational Category 26.2202 171805	Projected Number of Employees					
Ship Builders	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required.
Painters	106	110	111	118	None	Yes
Carpenters	60	65	66	75	None	Yes
Marine Mechanics	38	38	38	39	None	Yes
Welders	20	22	22	25	None - 2 Yr. Deg.	Yes
Foremen	15	15	16	17	None - High Sch.	Yes
Electronics	14	14	14	15	None	Yes
Managers	13	14	14	15	None - 4 Yr. Deg	Yes
Secretaries	10	10	10	11	None - 2 Yr. Deg.	No
Fiberglass Laminators	6	8	8	10	None	Yes
Bookkeepers	7	8	8	8	None - 2 Yr. Deg.	Yes

Occupational Category 26.2300 171900	Projected Number of Employees					
Manufacturing/Machine Shops	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Assemblers/Production Workers	3119	3740	4037	4335	None - 2 Yr. Deg.	No
Inspectors	799	846	879	911	None - 2 Yr. Deg.	No
Managers	642	684	733	810	None - Grad. Wk.	Yes
Foremen/Supervisors	547	591	637	691	None - 4 Yr Cert.	Yes
Engineers	472	561	636	719	None - Grad. Wk.	Yes
Electronic Technicians	344	405	451	536	None - 1 Yr Cert.	No
All-around Machinists	313	357	384	429	None - 4 Yr. Deg.	Yes
Manufacturers Sales Reps.	333	356	380	432	None - 4 Yr. Deg.	Yes
Secretaries	290	323	361	426	None - 4 Yr Cert.	Yes
Electricians	226	268	321	334	None - 2 Yr Deg.	Yes

Occupational Category 26.3201 171503	Projected Number of Employees					
Utilities/Energy Sources	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Deliverymen	12	9	9	9	None	No
Clerks	10	6	6	6	None	Yes
Servicemen	6	6	6	6	None	No
Welders	6	6	6	6	None	Yes
Laborers	6	6	6	6	None	No
Sales People	5	5	5	5	None	Yes

~~Occupation~~al Category 26.9907 160600	Projected Number of Employees					
Radio Stations	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Radio Service Technicians	25	25	30	35	2 Yr. Deg.	No
Sales People	27	27	27	32	None - High Sch.	No
Radio Announcers	17	17	17	17	1 Yr Cert.	Yes
Telephone Operators	8	10	12	12	High Sch.	No
Secretaries	7	8	8	8	2 Yr. Deg. 1 Yr Cert.	Yes

Occupational Category 27.022 172205	Projected Number of Employees					
Security	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Security Officers	452	497	547	815	None	Yes
Watchmen	200	210	215	230	None	No
Stadium Personnel	15	15	15	15	None	No
Supervisors	8	8	10	15	2 Yr. Deg.	No
Patrolmen	0	0	10	25	None	No

Occupational Category 27.0300 090207	Projected Number of Employees					
Schools/Universities	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Instructors	205	226	233	252	None - 4 Yr. Deg.	Yes
Secretaries	57	61	65	66	None - 2 Yr. Deg	Yes
Custodians	55	59	61	63	None - High Sch.	Yes
Groundskeepers	39	41	43	43	None	Yes
Accounting Clerks	17	19	19	21	None - 2 Yr. Deg	Yes
Admissions/Registration Coordinators	17	17	19	19	None - [illegible] Yr. Deg	Yes
Clerk Typists	16	17	19	19	High Sch.	Yes
Student Advisors	15	16	17	17	None - Grad. Wk.	Yes
Admissions/Registration Clerks	14	14	16	16	High Sch. 2 Yr. Deg	Yes
Records Specialists	12	14	16	16	High Sch. Grad. Wk.	Yes

Occupational Category 27.0800 173200	Projected Number of Employees					
City Government	Current # of Employees	1 Year from Now	2 Years from Now	5 Years from Now	Minimum Education Required	Experience Required
Police Officers	733	748	773	856	None - High Sch.	No
Firefighters	319	334	355	395	None - High Sch.	Yes
Municipal Maintenancemen	191	197	203	208	None - High Sch.	Yes
Maintenance Mechanics	186	186	188	188	None - High Sch.	Yes
Clerk Typists	139	140	142	149	None - High Sch.	No
Police Sergeants	127	130	134	142	None - 2 Yr. Deg.	Yes
Driver/Engineers	124	127	130	136	None - High Sch.	Yes
Fire Lieutenants	105	107	111	115	None - 2 Yr. Deg.	Yes
Police Aides	111	111	111	111	None - High Sch.	No
General Maintenance	101	101	101	101	None - High Sch.	No
Secretaries	78	78	79	84	None - 1 Yr Cert.	Yes

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HIGHEST PROJECTED DEMAND OCCUPATIONS

(based upon 2-year projections)

OCCUPATIONAL TITLE	TWO-YEAR PROJECTIONS
Sales	4724
Assemblers/Production	4037
Managers	3586
Waiters/Waitresses	3386
Registered Nurses	2281
Nurses Aides	1910
Housekeeping Personnel	1844
Secretaries	1451
Bookkeepers	1234
Cooks & Chefs	1226

Appendix L

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Nurseries/Florists/Landscapers 21.0000 010000	Projected 5-Year Growth (Percentage)
Irrigation Specialists	100
Sales Representatives	100
Floral Designers	67
Laborers	63
Floral Consultants	50
Agricultural Foremen	50
Taxidermist 21.0101 010101	**Projected 5-Year Growth (Percentage)**
Secretaries	50
Bookkeepers	50
Pest Control Services 21.0200 160200	**Projected 5-Year Growth (Percentage)**
Route Supervisors	100
Bookkeepers	50
Monthly Salespeople	33
Termite Control Salespeople	33
Lawn Control Salespeople	33

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Golf Courses/Country Clubs 21.0300 010300	Projected 5-Year Growth (Percentage)
Office Machine Operators	50
Auto Dealerships 22.0300 040300	Projected 5-Year Growth (Percentage)
Courtesy Drivers	44
Automobile Trimmers/Installers	36
Air Conditioning Mechanics	33
Auto Leasing 22.0300 040300	Projected 5-Year Growth (Percentage)
Drivers	58
Automobile Mechanics	53
Reservationists	40
Dispatchers	33

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Banks/Savings & Loans 22.0400 040400	Projected 5-Year Growth (Percentage)
Systems Analysts	140
Programmers	92
Loan Servicing Officers	89
Mortgage Officers	86
Key Punch Operators	86
Operations Officers	75
Auditors	75
Cashiers	67
Couriers	67
Computer Operators	64

Commercial Banks 22.0400 040400	Projected 5-Year Growth (Percentage)
Programmers	75
Mortgage Officers	67
Public Relations/Adv. Pers.	60
New Accounting Clerks	57
Dictaphone Typists	56
Couriers	56
Typists	52
Operations Officers	51
Personnel Managers	50
Head Tellers	50
Teletype Operators	50

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Stock Brokers 22.0450 040406	Projected 5-Year Growth (Percentage)
Margin Bookkeepers	200
Sales Assistant Secretary	140
Stock Brokers	118
Retail Grocers/Wholesalers 22.0600 040600	Projected 5-Year Growth (Percentage)
Branch Managers	100
Cashiers	63
Meat Cutters	50
Produce Wrappers	50
Managers	44
Route People	44
Office Machine Operators	43
Parking Personnel	33
Food Services 22.0700 040700	Projected 5-Year Growth (Percentage)
Secretaries	83
Cooks & Chefs	69
Cashiers	67
General Building Maintenance	50
Bookkeepers	50

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Hotels/Restaurants 22.1100 041100	Projected 5-Year Growth (Percentage)
Valets	79
Banquet Stewards	58
Parking Attendants	51
Life Guards	50
Laundry Managers	43
Accounts Payable Clerks	38
Reservation Clerks	38
Air Conditioning Mechanics	38
Food Checkers	36
House Stewards	36

Restaurants/Nightclubs 22.1100 041100	Projected 5-Year Growth (Percentage)
Waiters & Waitresses	222
Grillmen	200
Closers	200
Food Checkers	193
Managers	189
Cashiers	79
Cooks & Chefs	72
Secretaries	64
Stock Room Help	57
Purchasing Agents	53

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Insurance Cos./Property Mgmt. 22.1300 041700	Projected 5-Year Growth (Percentage)
Salespeople	154
Pension Specialists	100
Insurance Agents/Brokers	64
Sales Managers/Supervisors	50
Telephone Solicitors	40
Bookkeepers	33

Petroleum Services 22.1600 041600	Projected 5-Year Growth (Percentage)
Tankermen	100
Shift Leaders	67
Painters	50
Service Technicians	50
Terminal Operators	33

Real Estate/Land Development 22.1700 041700	Projected 5-Year Growth (Percentage)
Engineering Technicians	100
Draftsmen	38
Survey Instrument Men	38
Survey Party Chiefs	33

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Amusements/Race Tracks 22.1800 041800	Projected 5-Year Growth (Percentage)
	No growth projected
Trucking/Moving/Delivery 22.1900 041900	Projected 5-Year Growth (Percentage)
Claims Adjustors	300
Telephone Solicitors	100
Telephone Operators	80
Shipping & Receiving Clerks	80
Truck Driver's Helpers	78
Storage Managers	60
Warehouse People	58
Bookkeepers	50
Moving Consultants	45
Operations Supervisors	36
File Clerks	36

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Department Stores/Retail Bus. 22.2000 042201	Projected 5-Year Growth (Percentage)
Jewelry/Watch Repair	133
Cashiers	61
Public Relations/Adv. Pers.	60
Credit Officials	50
Computer Operators	49
Department Managers	43
Advertising Artists	43
Security Personnel	43
Office Machine Operators	40
Programmers	40
Hospitals/Medical Services 23.0000 070000	Projected 5-Year Growth (Percentage)
Programmers	400
Bio-Medical Technicians	300
Medical Assistants	100
Homemaker/Home Health Aides	73
Ultra-Sound Technologists	64
Medical Records Technicians	39
Nurse Clinicians	38
Cardio-Pulmonary Tech.	37
Radiation Therapy Tech.	35
Lab Technologists	35

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Mortuary Services 23.0909 160519	**Projected 5-Year Growth (Percentage)**
Intern Funeral Directors	100
Intern Embalmers	67
Lead Directors	33
Maid/Cleaning Services 24.0205 090699	**Projected 5-Year Growth (Percentage)**
Secretaries	150
Sales People	100
Driver/Managers	64
Maids	39
Accounting/Computer/Comm. 25.0100 140100	**Projected 5-Year Growth (Percentage)**
Receptionists	96
Repairmen	86
Tax Preparers	52
Computer Technologists	50
Service Representatives	37
Housekeeping Personnel	33
Employment Services 25.0600 140600	**Projected 5-Year Growth (Percentage)**
Key Punch Operators	614

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Law Firms 25.0707 160516	Projected 5-Year Growth (Percentage)
Para-legals	167
Word Processing Typists	79
Librarians	50
Couriers	50
Attorneys	38
Electrical/Air Cond. Repairs 26.0101 170102	Projected 5-Year Growth (Percentage)
	No growth projected
Airlines 26.0400 170504	Projected 5-Year Growth (Percentage)
Sales People	200
Refuelers	67
Bookkeepers	33

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Construction 26.1000 170900	Projected 5-Year Growth (Percentage)
Tile Setters	200
Roofers	90
Painters/Paper Hangers	84
Shingle Layers	78
Pre-cast Installers	75
Payroll Clerks	67
Security Personnel	67
Sheet Metal Workers	41
Architectural Occupations 26.1011 160103	Projected 5-Year Growth (Percentage)
Architectural Drafters	200
Technical Writers	100
Interior Designers	50
Pool Maintenance Services 26.1106 171006	Projected 5-Year Growth (Percentage)
	No growth projected

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Laundries/Dry Cleaning 26.1600 172500	Projected 5-Year Growth (Percentage)
Cashiers/Counter Sales People	86
Spotters	50
Checkers	44
Bookkeepers	40
Printers/Newspapers/Photog. 26.1900 170800	Projected 5-Year Growth (Percentage)
Book Binders	63
Inspectors	50
Typists	50
Purchasing Agents	50
Mechanical Artists	50
Statistical Clerks	38
Bindery Specialists/Tech.	38
Duplicating Equip. Operators	33
Ship Builders 26.2202 171805	Projected 5-Year Growth (Percentage)
Fiberglass Laminators	67

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Manufacturing/Machine Shops 26.2300 171900	Projected 5-Year Growth (Percentage)
Contract Administrators	213
Profile Operators	91
Product & Material Control	88
File Clerks	82
Pipefitters	79
Tool & Die Makers	76
Pnt. Grinders/Shaders/Fillers	70
Real Time Programmers	67
Programmers	56
Electronic Technicians	56
Energy Sources/Utilities 26.3201 171503	Projected 5-Year Growth (Percentage)
Installers	50
Clerks	40
Radio Stations 26.9907 160600	Projected 5-Year Growth (Percentage)
Telephone Operators	50
Radio Service Technicians	40

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

Security 27.0202 172205	Projected 5-Year Growth (Percentage)
Bookkeepers	200
Supervisors	88
Security Officers	80
Office Managers	50
Investigators/Inspectors	50
Schools/Universities 27.0300 090207	Projected 5-Year Growth (Percentage)
Student Activities Specialists	300
Textbook Buyers	200
Graphics Technicians	200
Computer Operators	133
Asst. Executive Secretaries	100
Buyers	100
Gardeners	100
Graphics Illustrators	100
Mail Clerks	100
Personnel Specialists	100
Programmers	100
Television Engineers	100
Vehicle Maint. Supervisors	100

PROJECTED 5-YEAR GROWTH BY OCCUPATIONAL CATEGORY (PERCENTAGE)

Occupational Category

City Government 27.0800 173200	Projected 5-Year Growth (Percentage)
Plumbing Inspectors 1	157
Property Control Clerks	150
Mobile Parts Expeditors	100
Landscape Inspectors 1	100
Planning Technicians	67
Computer Operators 1	50
Mechanical Inspectors	50
Plumbers (Maintenance)	50
Victim Ombudsmen	50
Battalion Chiefs	40
Buyers	40

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